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NINETEENTH ANNUAL REPORT

OF THE

DAIRY AND FOOD COMMISSIONER

OF THE

STATE OF MICHIGAN

FOR THE

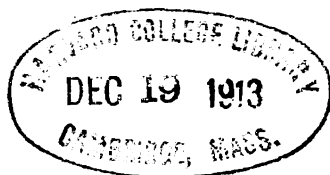
YEAR ENDING JUNE 30, 1912.



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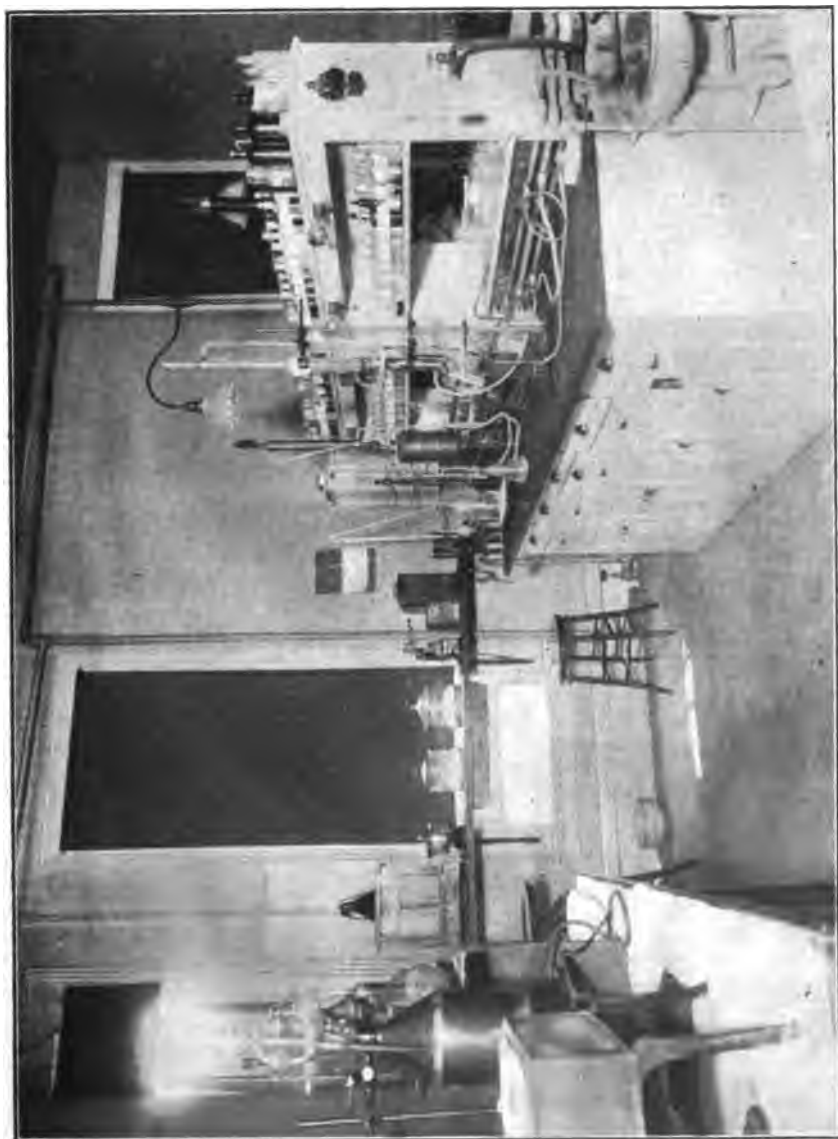
GILMAN M. DAME.....	Commissioner
JAMES W. HELME.....	Deputy Commissioner
FERN L. SHANNON.....	State Analyst
M. J. SMITH.....	Chief Clerk
L. H. VAN WORMER.....	Assistant Chemist
MISS IDA M. HARRIS.....	Clerk
MISS GERTRUDE VALLIERE.....	Clerk
MISS NAN CHILDS.....	Clerk
M. A. JOHNSTON.....	Clerk
JOHN B. BARRON.....	Regular Inspector
GEORGE N. WHIPPLE.....	Regular Inspector
JOHN MUNN.....	Regular Inspector
A. C. ROWLADER.....	Regular Inspector
JOHN T. ROWE.....	Regular Inspector
C. H. GEELHOED.....	Regular Inspector
CHARLES E. ALEY.....	Regular Inspector
WM. T. HULSCHER.....	Regular Inspector
D. J. FARRELL.....	Special Inspector
ELMER TEALL.....	Special Inspector
C. V. JONES.....	Special Inspector
O. F. MEISELBACH.....	Special Inspector
H. F. WILSON.....	Messenger and Janitor

DRUG INSPECTION.

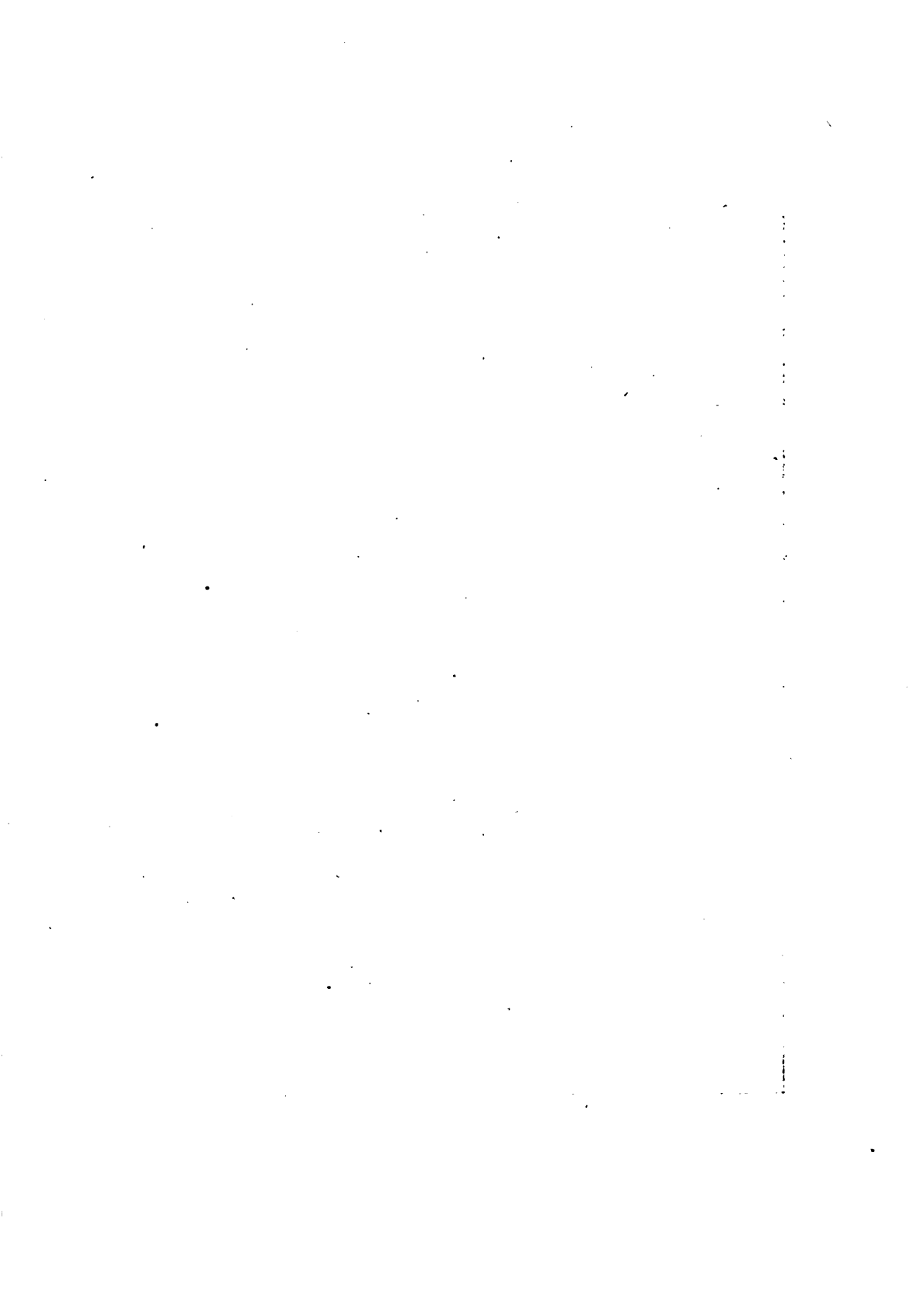
A. R. TODD.....	Drug Analyst
JOHN E. GEROW.....	Drug Inspector
G. W. SLY.....	Drug Inspector

APIARY INSPECTION.

GARRY E. SANDERS	Apiary Inspector
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LABORATORY NO. 4.



LETTER OF TRANSMITTAL.

DAIRY AND FOOD DEPARTMENT,
Lansing, Michigan.

Hon. Chase S. Osborn, Governor:

Sir:—In compliance with the provisions of section 9, Act No. 211, Public Acts of 1893, I have the honor to submit the report in detail of the work of this Department for the year ending June 30, 1912.

The policy of the present administration of the Michigan Dairy and Food Department has been to accomplish as much work as possible at the least possible expense. During the year there were employed in inspection work on an average of twelve inspectors. Their duties covered the inspection of food products at the factory, in the wholesale house and with the retailer. It also called them to the creameries, cheese factories, and other dairy producing plants in the state as well as to the dairies themselves. Inspection was given to drug stores, restaurants, hotels, bakeries, ice cream plants and to all places where foods are kept or stored.

By referring to the Department's financial statement appearing in another part of this report, it will be found that \$52,648.90 were available for the fiscal year ending June 30, 1912. Of this amount \$41,122.45 were expended and \$11,526.45 covered back into the state treasury.

The total number of inspections made during the year aggregated 20,257 divided as follows: Food inspections 12,154; bakeries, 3,171; dairies, cheese factories, creameries, etc., 2,307; hotels, 352 and drug stores, 2,273. A detailed report of each inspection made is on file in the office. In the inspection of bakeries, hotels and restaurants particular attention was given to the problem of sanitation and cleanliness. This also may be said with reference to all places visited, but in addition to the question of sanitation and cleanliness, the food inspectors go carefully over each and every article sold or offered for sale in all places they visit for the purpose of determining, first, whether any food sold or offered for sale therein is adulterated, and second, whether it is misbranded which in a word means whether the label discloses to the purchaser the true character of the food which he receives.

The amount of work involved in a careful and rigid inspection of the average grocery store is considerable, and unless done with care and precision is of little amount. To make this valuable and of real benefit, has been the aim and ambition of the Department during the present administration. Inspectors are experts in their business. They are in most cases able to determine from a careful examination of the food product whether or not it is manufactured and sold in accordance with law. Therefore but a small percentage of the articles examined are sent to the

laboratory. Illustrative of this may be cited the work done by the Department's drug inspectors. While but 282 official samples were taken and sent to the laboratory, the inspectors in their field work condemned 46,592 bottles, these being preparations which were either improperly labeled or below the required standard.

LABORATORY WORK.

Four chemists were employed in the laboratory during the year, one of whom gave his entire attention to drug work. 3,552 samples were examined of which 3,070 were food and drink products, 282 drug products and 200 commercial feeds. A complete report of the laboratory work will be found in the State Analyst's report which appears in another part of this publication.

PROSECUTIONS.

Fifty prosecutions were instituted by the Department during the past year which resulted in 39 convictions, 2 acquittals, 3 dismissals on motion and the remaining number of cases instituted are still pending. It is and has been the policy of the Department to use the utmost caution in the institution of prosecutions. It is not a pleasant duty that devolves upon the commissioner to authorize the institution of a prosecution. No prosecution is commenced against any person unless he has once been warned, unless it is apparent that the offense committed is without justification and that its commission was deliberate and wilful. It furnishes food for thought as to why a dealer in foods or other products, after having been notified and warned, will continue to manufacture or sell prohibited foods to the extent that it becomes necessary for the Department to institute a prosecution. It can only be explained in one of two ways; either he is grossly negligent, or he flatters himself with the belief that the Department after serving the notice will take no further action. To impress those who continue to violate the law, it has been and will remain the policy of this administration to promptly and vigorously prosecute those who disregard a fair warning.

SPECIAL INVESTIGATIONS.

During the year the Department gave special attention to the examination of certain food products which had heretofore received no particular attention, viz.:

MINCE MEAT.

It is the understanding and contention of those charged with the enforcement of the state's food laws that mince meat means legally what the housewife and consuming public understand it to mean, a mixture of a considerable amount of boiled meat, suet, etc., with fruit added. As mince meat was and is manufactured in the home, and as an exceedingly large number of consumers understand it to be manufactured commercially, corn syrup has no place in its formula, and a considerable amount of meat is always present. The investigation which the Department conducted disclosed the fact that in some brands of commercial

mince meat, there was no meat of any kind or description present. Mince meat without any meat in it was determined to be not in conformity with the spirit and intent of the state's food law and it is now held that mince meat shall contain not less than 10% cooked cominuted meat. Manufacturers were warned to comply with the law as interpreted by the Department, and almost without exception changed their formulas. The mince meat on the Michigan market today is not what it was a year ago.

SACCHARIN IN SOFT DRINKS.

In November and December the Department gave special attention to the examination of soft drinks and found that saccharin was extensively used as a sweetening property. Prompt and vigorous measures were at once taken to bring about a remedial effect in the manufacture of these drinks. During the months above mentioned 690 samples were analyzed and but 257 disclosed the absence of saccharin. Many subsequent analyses of later samples taken prove to us that the use of saccharin as a sweetening property has been discontinued.

In addition to the samples taken by the inspectors and sent to the laboratory, inspectors condemned 68,679 bottles of the different brands of soft drinks which contained saccharin. These were not only removed from sale but were voluntarily destroyed by the manufacturers on the date of the inspector's visit.

CANDY.

With a view of determining whether or not the many grades of candy offered for sale in Michigan contained substances that might be poisonous or injurious to health, the Department inspectors were instructed to secure samples of each and every kind of candy that could be found, and further instructed that at the time such samples were taken the most rigid investigation be made into the manner in which such candy was produced, with a view to cleanliness and sanitation. Two hundred seventy-eight samples were secured and 278 samples were later found to be pure, a remarkable showing and a showing that speaks well for the candy industry. During the year the Department was called on to institute but one prosecution for the adulteration of candy.

RICE.

Rice is another product which called for special attention. It is our contention that the consumer should receive his rice without adulteration, manipulation or sophistication, that he should receive it in its natural state without color, without polish, and without deceptive manipulation which would have a tendency to make it appear better and of greater value than it really is. Rice as found on the market was coated or polished, glucose and talc were added and thereby the most inferior grades were made to appear of equal value with the better grades. Dealers and handlers of rice were served with written notice that rice treated in the manner indicated was held to be wholly in conflict with the provisions of the Michigan food law, and that the further treating of rice as above described would be contested; wholesalers hav-

ing until January 1, 1913, to dispose of stocks on hand. It is a matter for congratulation that wholesalers with few exceptions fell in line and endorsed the Department's position with the assurance that the ruling would be complied with.

PRESERVATIVES.

The use of questionable preservatives in the preparation of food products is a matter requiring constant vigilance. Several prosecutions against local dealers followed with severe penalties were instituted. It is to be regretted that the manufacturer of the preservatives in question, the party who is primarily responsible for their use in the state, is not within the state's jurisdiction. It therefore becomes necessary to look to the local dealer and hold him responsible. Notice is served on all dealers in food products, and on dealers in meat products in particular, that the Department will continue to enforce the law in its application to preservatives.

COMMERCIAL FEEDING STUFFS.

With its other duties, the Department is charged with the enforcement of what is known as the state concentrated commercial feeding stuffs law. This law provides first that each sack or container in which a concentrated feed is offered for sale shall bear a statement showing the amount of crude protein, crude fibre, nitrogen-free extract and ether extract contained in the feed. It further provides that the manufacturer shall file with the Department an average one pound sample of the feed which he manufactures and sells, evidently with the intention of determining from an analysis of this sample whether the guarantee which he files in writing truly states the feeding value of the feed in question. Heretofore it has been the practice to analyze the sample sent by the manufacturer and publish the result of this analysis together with the guaranteed analysis. With knowledge gained from experience, it seemed advisable to pay more particular attention not to the sample that the manufacturer had himself sent to the laboratory, but to samples secured here, there and everywhere in different parts of the state. It appeared that the correct way to check up on the manufacturer was not to judge from the result of the analysis of the sample which he had himself taken and sent, but to enable the purchaser to determine the feeding value from results of analyses of samples taken indiscriminately in different sections of the state. This policy was carried into effect during the past year and it is a source of congratulation to be able to announce that out of 220 samples of the different feeds licensed in the state, less than twenty were found to be below the guaranteed analysis as filed in the office and as printed on the tags attached to or stamped on the containers or sacks in which these feeds were sold. This method of enforcing the feeding stuffs law assures to the consumer a feed with feeding value as represented. Insofar as the present feeding stuffs law is concerned, there is but one recommendation to make. It is believed from the experience attained that the manufacturer should be required to state, in addition to its protein, fat and fibre content, the ingredients from which he manufactures the feed.

NEEDED LEGISLATION.

During the session of 1911, there was caused to be introduced in the legislature several bills which were aimed to strengthen existing laws and furnish a means of bringing about better results as a whole in the problem of pure foods, cleanliness and sanitation. Most of the bills failed of passage. This resulted from want of time rather than any apparent disposition on the part of the legislature to withhold its approval of the bills presented. At that session of the legislature Act No. 175, being an act regulating the sale of turpentine and providing for a penalty for the violation of the act was passed. This act should be amended. In its present condition it is in some respects vague and impracticable and therefore impossible of enforcement.

FOOD PRODUCTS IN COLD STORAGE.

The question of the proper control of goods in cold storage is absorbing the minds of the people today and it is earnestly recommended that the incoming legislature take cognizance of this matter and provide suitable and practical legislation having to do with food products kept in cold storage.

SLAUGHTER HOUSES AND MEAT MARKETS.

An all important question is the proper regulation of slaughter houses, meat markets, etc., and the inspection of meat and to provide for sanitation and cleanliness surrounding all places where meat intended for sale is kept or stored. It is urgently recommended that slaughter houses and meats be placed under state control and that means be provided for rigid inspection.

VINEGAR.

The state law regulating the manufacture and sale of vinegar was passed in 1897 and is designed to control but two kinds of vinegar, to-wit, fermented and distilled. Since that time new interests have arisen and new methods have been devised which make possible the manufacture of an entirely wholesome yet altogether different vinegar product from those which the old law was designed to cover. These vinegars being entirely wholesome should not be barred from a place on the market, yet legislation should be enacted which will provide a means that will remove them from unjust or unfair competition with vinegars of a higher grade and therefore costlier price. This result can be accomplished through legislation compelling the proper labeling of the packages or containers which go to the consumer.

APIARY INSPECTION.

The bee industry of the state is on the increase. In 1901 the legislature provided for an apiary inspector and fixed an annual appropriation of \$500 for apiary inspection. This amount is entirely inadequate and I recommend that it be increased to the extent that reasonable and effective inspection can be furnished.

LETTER OF TRANSMITTAL.

INSPECTION OF WEIGHTS AND MEASURES.

I would recommend that an efficient state law be passed relative to weights and measures. The food inspectors of this department could with very little additional trouble, inspect the weights and measures at all places visited by them. The present state law on this subject, passed over fifty years ago, is obsolete and useless because it is made the duty of no official to enforce the same.

MISLEADING ADVERTISING.

Several prosecutions have been started for the deceptive advertising of oleo with butter which is prohibited by law. In our investigations of these cases the fact was brought to the attention of this department that other food stuffs, notably coffee, cereals, are being advertised deceptively as coffee. I would recommend legislation prohibiting deceptive advertising in newspapers or elsewhere of all kinds of food stuffs.

GENERAL FOOD LAW.

To sum up let me say that the law under which the Department is operating was passed in 1895. Any changes that may hereafter be made, and all new food legislation should be made to conform as nearly as possible with the national law. The national food law and the food law of Michigan in their application to wilful adulteration are practically alike. The differences that exist affect technical questions of labeling, and have a tendency to embarrass and confuse honest manufacturers who have no disposition to defraud the public, yet owing to same are put to enormous expense in the preparation of the different labels without affording any real benefit to the consumer by reason of such differences. Food products may be classed as simple, mixed or compounds. No difficulty is to be met with in labeling the former. It is with the labeling of the mixed and compounds that all interested have to contend. The label should show clearly and distinctly of what the product is composed and the various laws, national and state, regulating the preparation of these labels should be uniform.

The successful enforcement of the state's food law demands the best talent available. Technical knowledge is required not only in the laboratories but of inspectors and others connected with the Department. The present salaries fixed by statute are entirely inadequate and not in proportion to that paid for like services in other states. I recommend that the incoming legislature give careful consideration to this feature of the state's food law and provide means by which the several employees may be adequately paid for their services.

In conclusion, it gives me pleasure to say that the Department's work as a whole has been successful and the earnest, painstaking efforts of those associated with me in the work are commended.

Respectfully submitted,

GILMAN M. DAME,

State Dairy and Food Commissioner.

HOMOGENIZER.

BY JAMES W. HELME.

During the year a new dairy apparatus has come into use known as the homogenizer. In this machine, by means of heavy pressure, skim milk and butter fat can be mixed and by forcing the same through the machine an emulsification of the fat and milk takes place and an artificial milk or cream can be produced that will stand a legal test for fat solids. We have reason to believe that some users of this machine have incorporated packing-stock butter and perhaps oleo and other cheap fats with skim milk to make a "cream" for producing ice cream. There are also reasons for believing that at some places skim milk and cheap fats are being run through this machine for the purpose of making a "milk," which is used in cheese making. These machines are expensive, costing one thousand dollars and upwards, and so are available only to the large manufacturers. By cheapening the cost of materials the large manufacturer thus has an unfair and dishonest advantage of his smaller competitor who uses legitimate products. I would recommend that the use of this machine be prohibited or at least that the product should be distinctively labeled as "homogenized" so as to protect the consumer.

ALFALFA: THE DAIRYMAN'S BEST FRIEND.

Ten years ago the writer began to grow alfalfa in southern Michigan. At first he made some mistakes and had some failures, but gradually experience taught him how to remedy his early failures until during the last three years he has used no other hay than alfalfa and he can grow a crop with more certainty of success than he can of red clover or any other forage crop.

SOIL FOR ALFALFA.

Alfalfa seems to thrive well on sandy or clay soils provided they are well drained. Permanent moisture should not be nearer than five feet of the surface. It does not do well on rich muck lands or lands naturally wet, and standing surface water will kill alfalfa in two or three days. Alfalfa needs a fairly rich soil to start on. It is a mistake to sow it on poor land without liberal fertilization.

SOWING ALFALFA.

Alfalfa should be sown just as early in the spring as possible, in April or March if possible. Frosts, or even freezing weather, will not hurt the young alfalfa plants. It grows in cold weather when most weeds

are dormant and early seeding gives it a chance to get ahead of the weeds. It may be sown alone or with a nurse crop. If the latter is used, a bushel of barley to the acre is the best. The writer sows it alone and generally gets one good crop of hay the same season and sometimes two. Twenty pounds of seed to the acre is about the right amount to sow. I prepare my ground thoroughly making a good seed bed, I sow broadcast, use a weeder to cover the seed and then roll the ground.

While I have never inoculated my soils with alfalfa bacteria, the value of a good stand of alfalfa is so great that I recommend inoculation. It may be done in three ways. First, by treating the seed with a culture of bacteria which can be obtained at the Agricultural College. Second, by sowing a pound of sweet clover seed to every twenty pounds of alfalfa. Third, by sowing on the field, soil taken from an old alfalfa field or along the road where sweet clover flourishes.

CLIPPING AND CUTTING.

Unless the weeds show up very bad I would not clip it until the alfalfa shows blossoms. Often the first year it will turn yellow when six or eight inches high. Mow it down at once and it will come up nice and green. Let it go into winter with an aftermath six inches high to hold the snow.

TIME TO CUT ALFALFA HAY.

Most people cut alfalfa too late. As soon as blossoms begin to appear it is time to cut the crop. This is very important especially with the first crop. If the first crop is allowed to get into full bloom before cutting, the next crop will be seriously injured. It is said that it will pay to cut the first crop on time and lose it rather than postpone the cutting for weather conditions. Moreover, the hay has a greater feeding value if cut early and the stand will be benefited.

CURING THE HAY.

Alfalfa will stand more wet weather in the cock than red clover. If allowed to lie in the sun too long the leaves will rattle off. In practice after cutting I allow it to get well wilted, then I rake it up and let it stand and cure in the cock for several days. Then I open up the cocks for about an hour to dry off the sweat and then draw. In rainy weather, which is probable during the first and third cutting, I find hay caps of great value. For these I buy common unbleached sheeting 40 inches wide, making a cap 40 inches square. In each corner I sew an 8-ounce stone to weight them. Such a cap costs nine cents and will do excellent service for years if taken care of.

ALFALFA HAY AS A DAIRY FEED.

Chemical analysis shows that well cured alfalfa hay has the same food value as bran, pound for pound. Here lies its great value, to the dairyman, as it furnishes him the necessary protein for a milk ration. Fifteen pounds of alfalfa hay and 35 pounds of corn silage furnish a number one balanced ration for a 1,200 pound dairy cow. It is doubtful if it will pay to feed grain with such a ration. Horses will leave their grain

to eat alfalfa. Fed alone it makes an ideal winter ration for the brood sow.

VALUE TO THE SOIL.

Alfalfa, like red clover and other legumes, takes nitrogen from the air and stores it in the ground. It is thus a soil builder. Theoretically it is a permanent grass but after about five years June grass will begin to appear in the field and run the alfalfa out and it is well to turn it under after five years cutting and put it into corn. Alfalfa does not do well on acid soils and hence lime is often applied to new fields. The ground lime stone rock is usually used but there is no better form of lime to use than marl which can be found in many lakes and swamps all over Michigan. If a commercial fertilizer is used when seeding, one strong with phosphoric acid is the best.

WHY EVERY FARMER SHOULD GROW ALFALFA.

- First, It will yield four to five tons of hay per acre each year.
 - Second, It has a greater food value than any other coarse forage.
 - Third, All stock like it and do well on it.
 - Fourth, It enriches the soil and makes possible better crops.
 - Fifth, A seeding once started lasts for years, a great saving over seedings of red clover.
 - Sixth, All stock like it and it furnishes a rich food that enables a farmer to dispense with many feed bills.
 - Seventh, While cattle and horses should not be pastured on it, it makes the very best possible hog pasture for the production of cheap pork.
- Try a few acres of alfalfa this coming spring and learn to grow it. You will have to get into the game sooner or later and why not "do it now."

FORMIC ACID AS A PRESERVATIVE OF FRUIT SYRUPS.

BY F. L. SHANNON.

Formic acid in 10% aqueous solution, has been exploited for some time under the names Werderol, Fructol, etc., in Germany and England as a preservative for fruit syrups, etc. It is generally used in quantities of 0.1%–0.25% of absolute acid and has been found to be a very efficient preservative, retarding fermentative changes to a marked degree. In this strength the preservative is odorless and has a characteristic sour taste not unlike that of the natural fruit acids. Although this preservative is very freely used in Germany and England, it appears not to have received much attention from manufacturers of fruit products in this country. At least the literature and the reports of the Federal and State Departments do not disclose its use as a preservative in American fruit products.

It is universally recognized that fruit syrups are prone to spoiling, that is fermenting and molding as ordinarily exposed at the soda fountain, unless they be chemically preserved.

The Crown Cordial and Extract Company of New York City are offer-

ing a line of soda fountain syrups which are said not to spoil and which are sold under a label that makes no mention of the use of sodium benzoate or any other chemical antiseptic. Extended experience with fruit syrups; caused me to look upon these products with suspicion. Consequently, during the past few months a study of fruit products has been made in this laboratory for the possible presence of added substances not mentioned in the list of ordinary preservatives used in this country. The markedly sour or tart taste of the Crown products (strawberry and pineapple) when compared with other syrups was very conspicuous. This fact led to an extended investigation, (the details of which will appear in a later article) which resulted in the positive detection of added formic acid in considerable quantity, viz., about 0.10%–0.15%.

Since the Crown Cordial and Extract Company's fruit products are widely advertised in druggists' and confectioners' journals, it is quite likely that they are or will be used at soda fountains in this state. According to the provisions of Section 1, Act No. 7, Public Acts of 1905, "No person, firm or corporation shall manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any food product containing benzoic acid or benzoate of sodium, or any other harmless preservative, unless each and every package containing the same shall, in the condition in which it is exposed for sale, be distinctly, conspicuously and legibly branded, labeled or marked, in plain English letters, with the words 'Prepared with' followed by the proper English name of the preservative used: Provided, That nothing in this act shall be construed to prohibit or regulate, by branding or otherwise, the use as a preservative of common salt, syrup, sugar, saltpetre, spices, alcohol, vinegar or wood smoke: And provided further, That the provisions of this act shall not apply to dairy products."

Therefore, these products, if sold under a label, which does not plainly state "Prepared with Formic Acid," are in violation of the Michigan Food Laws.

CLEAN COWS AND CLEAN STABLES.

JAMES W. HELME.

With the approach of fall it behooves every dairyman to consider plans for making his work easier and more wholesome during the winter weather.

When the writer was a boy, he was informed by many farmers—his father among the number—that "you can't keep cows clean." He remembers when a boy the cows he daily milked in the winter. A goodly part of the sides were plastered with manure. The udders were always daubed and received a more or less indifferent washing and the milker's clothes absorbed such an odor from the stable that it was almost impossible to sit at the table with him.

Things are different now in that barn. It has not been necessary in ten years to wash manure from a cow's udder,—there was none to wash, and the cow's sides are as clean in winter as summer. In fact it is easier to keep a cow clean than dirty.

NECESSITY OF CLEAN COWS.

Every interest of the dairyman demands clean cows. Dirty cows mean dirty milk, and dirty milk means that such milk sours more quickly, grows forms of bacteria that are dangerous to the health of infants and invalids consuming the same, besides imparting to the milk the so-called "stable flavor" which not only drives the private milk consumer to other producers but, if not used for direct consumption, it imparts said flavor to butter and cheese made from it.

STABLE TO KEEP COWS CLEAN.

There are many devices on the market in the form of stables and stanchions to keep cows clean. Most of them give good results and we are glad to see dairymen adopt the same. But there is a class of dairymen who say they cannot afford to pay the prices demanded for these patent contrivances. To such dairymen we wish to describe in full a stall which the writer has used in his stable for over ten years. Stalls of practically the same construction can be found in the stables of Ex-Governor Hoard, the editor of Hoard's Dairyman; Colon C. Lillie, of Michigan, and hosts of other prominent dairymen throughout the country. These stalls are cheap and simple, any farmer can build them—they are not patented. The cow is given more freedom than in any other form of cow stall and in addition, this stall keeps a cow absolutely clean. When properly adjusted the cow cannot get soiled.

THE MODEL STALL.

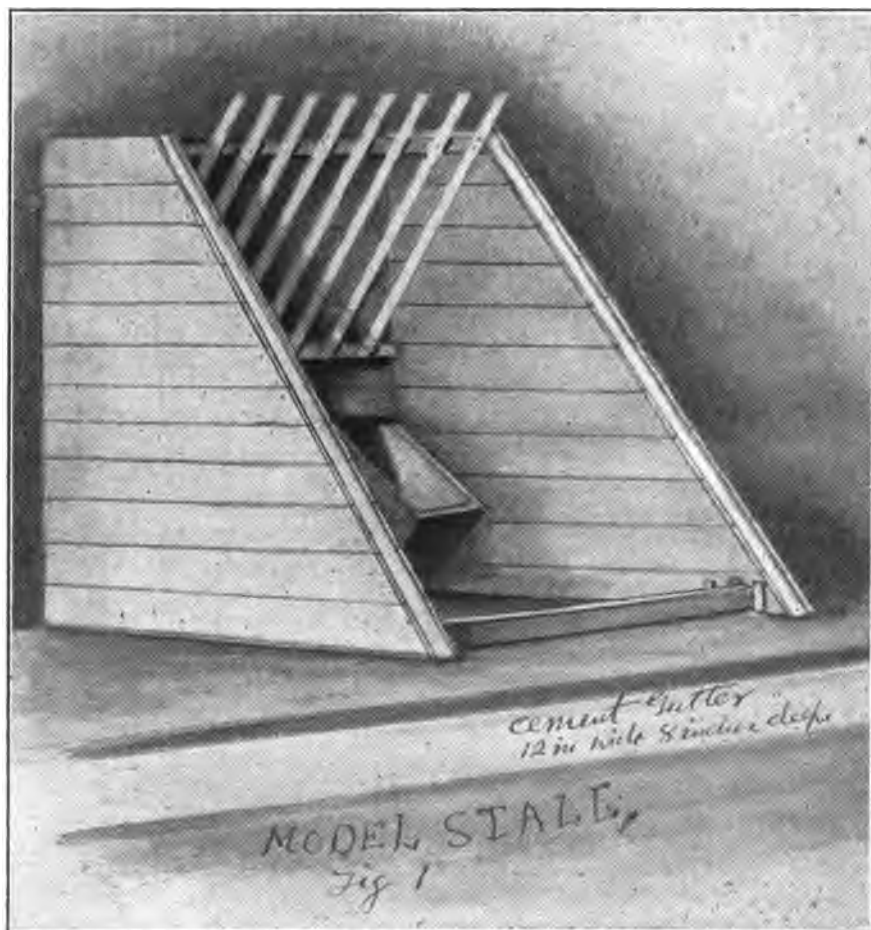
This stall is known as the "Model Stall." A cut of it (Fig. 1) is shown herewith.

The principal features of the stall can be readily seen. There are two things that compel the cow to keep clean. First, the slanting feed rack; second, a 2x4 which sets edgewise on the floor of the stall near the gutter. All bedding is placed in front of the 2x4, and the refuse feed dropping out of the rack furnishes all bedding necessary. As the bedding gets soiled very little, it is a great money saver to the dairyman who is compelled to buy bedding. When the cow eats, the slanting rack compels her to stand with her hind feet behind the 2x4 and the droppings do not soil the bedding but drop behind the 2x4 into the gutter. When the cow wishes to lie down, she will not lie across the 2x4 but drops her head down so as to avoid the rack; then she steps her hind feet upon the bedding in front of the 2x4 and lies down on the clean bedding. When she arises to resume eating the slanting feed rack compels her to stand with both hind feet behind the 2x4. When lying down her rump should project about a foot beyond the 2x4 toward the gutter, to prevent soiling the bedding while the cow is lying down. It will be noticed that the 2x4 is adjustable so that it can be adjusted to short or long cows as the occasion requires. A sliding feed box 3 feet long and a foot square completes the stall. This box is necessary as it keeps the feed towards the rear of the stall and thus keeps the cow's feet behind the 2x4 while eating. If the feed box is placed in the extreme corner of the stall it allows the cow to stand on the bedding with her hind feet while eating which soils it.

SPECIFICATIONS AND DIMENSIONS.

Fig. 2 shown below gives complete working specifications to build this stall. Scale $\frac{1}{2}$ -inch to the foot.

These stalls are $3\frac{1}{2}$ feet wide and are suitable for large Jerseys weighing from 1,000 to 1,200 lbs. For extra large cows of the Holstein and Durham type the stall should be 2 inches wider. The space from



the extreme front of the stall to the edge of the gutter, marked 9 feet can be shortened to $8\frac{1}{2}$ or even 8 feet, if there is a lack of room. The gutter forms no part of the plan to keep the cows clean. It is used only as a storage place for the manure until removed and to keep the liquid manure from spreading over the barn floor. The partition keeps each cow in her place and thus prevents damage to udders by trampling, which so often happens with staunchions.

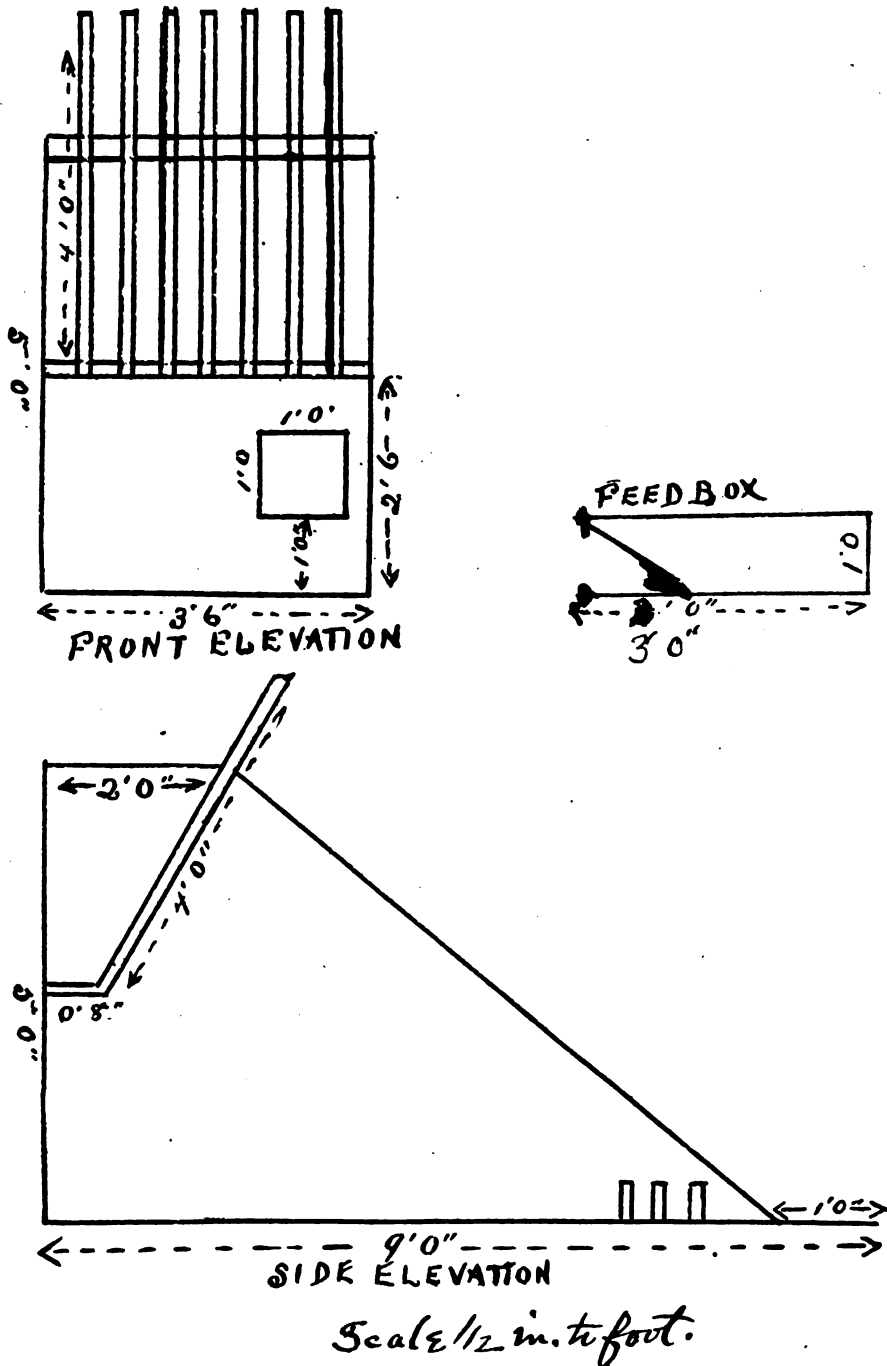


Fig. 2.—For specifications and dimensions see page 18.

TYING.

The bottom of the feed rack is 2x8. In the edge of this, staple a ring or bore a hole for tying purposes. The cow may be tied by a rope around the neck or horns or by a halter. If the rope has a snap and ring, tying can be done very quickly.

SUGGESTIONS FOR BEGINNERS.

Most cows learn quickly to step forward and lie in front of the 2x4. Occasionally a cow fails to understand it. With such a cow adjust the 2x4 as far back as possible so as to get her to lie in front of it. Then take it up a notch every other day until the proper place for keeping her clean is found.

After meals draw the sliding feed box back into the feeding alley so the cow can lie down. This will be necessary only a few times, as she soon learns to push it back out of her way with her head. If there is no feeding alley in front of the cow, a box or basket can be used and placed in the stall with the cow or, on application to the State Dairy & Food Dept., at Lansing, designs will be sent for a special feed box for this kind of stall which is attached by a strap hinge.

CONCLUSION.

This stall works as nearly perfect as any stall can. The writer has had 20 of these stalls in use for 12 years. The expense is so nominal that no dairyman has any excuse for having dirty cows the coming winter. If any dairyman wants further particulars relative to this stall, let him write Deputy Dairy and Food Commissioner, Lansing, Mich., for further information.

CLEAN STABLES.

Next to clean cows, clean stables are most important, which include light and the destruction of all disease germs and harmful bacteria. Nothing is so efficacious in this respect as a good coat of whitewash properly applied. The lime destroys absolutely all insects and harmful disease germs and bacteria and makes the stable much lighter and clean smelling. Every stable should be whitewashed once a year anyway, spring and fall would be better, and once each month for the cow stalls would be better yet.

WHITEWASH.

Common whitewash made by slaking lump quicklime in hot water makes the cheapest wash that can be applied. The "cold water paints" now on the market also make a splendid coating. If a superior whitewash is wanted, one that will not rub off but lasts for years, there is none better than the so-called "whitehouse" whitewash, the formula for which is given below. For the ceiling and sides of the barn this is especially desirable as it will last for many years. It is also extra good for outside work. The formula is as follows:

FORMULA FOR BRILLIANT WHITEWASH.

Half a bushel of unslaked lime, slake with warm water, cover it during the process to keep in the steam, strain the liquid through a fine sieve strainer; add a peck of salt previously well dissolved in warm water; three pounds of ground rice boiled to a thin paste and stir in boiling hot; half a pound of powdered Spanish whiting and a pound of glue which has been previously dissolved over a slow fire, and add five gallons of hot water to the mixture, stir well and let it stand for a few days, covered up from dirt. It should be put on hot. Coloring matter may be put in and made any shade; Spanish brown, yellow ochre, or common clay, etc. Strain before using.

APPLICATION OF WHITEWASHES.

The labor of whitewashing rough boards in stables has always been a great obstacle in applying whitewash. To do this job with a common whitewash brush by hand is a long, laborious, and exceedingly disagreeable job. Fortunately in this day of machinery this disagreeable job can be made exceedingly easy by the use of a modern spray pump. But many spray pumps are not suited for doing this work and have proved a delusion and a snare to the purchaser. In order that this department might recommend to the dairy men of Michigan practical apparatus for this purpose, the leading manufacturers of spray pumps were invited to make a practical demonstration of their respective pumps at the barns of the Deputy Dairy and Food Commissioner, at Adrian, Mich. From these practical demonstrations we can confidently recommend to the dairymen of Michigan the following pumps and nozzles for applying whitewash to stables and farm buildings.

Four Sprayers were tested for whitewashing at the barns of the writer.

The H. L. Hurst Mfg. Co. of Canton, Ohio, furnished one of their "Fitzall" barrel sprayers. This is suitable for large barns and will do all kinds of spraying work in addition.

The E. C. Brown Company of Rochester, New York, furnish a good outfit for barn spraying also suitable for fruit.

Sprayers to be used with a bucket or candy pail can be obtained of the Gould Mfg. Co. of Seneca Falls, New York. The Marysville Stamping Works of Marysville, Ohio, also furnish a pump suitable for small buildings and light spraying. Prices of these pumps can be obtained by writing the respective manufacturer or this Department. All inquiries relative to this bulletin should be addressed to the Deputy State Dairy and Food Commissioner, Lansing, Michigan.

DAIRY HINTS FOR FALL AND WINTER.

Now that the price of milk is around the \$2.00 mark, it behooves every dairyman to increase the flow in every way possible. To those dairy-men who are fortunate enough to have corn silage and alfalfa hay the feeding problem is easy, 35 lbs. of silage per day and 15 lbs. of alfalfa makes a balanced ration for a dairy cow that cannot be excelled. No grain is necessary with this ration unless the cow is an extra heavy milker, when 2 lbs. of cottonseed meal per day can be added. Mix it with the silage. If the dairyman has no alfalfa, but plenty of clover, then add the 2 lbs. of cottonseed meal any way to balance up the ration. If corn silage is not available then ground corn and oats should be fed and linseed meal or roots substituted for cottonseed.

WATERING.

Watering the cow is very important. She should have water with the chill removed. She ought to have it at least twice daily and preferably after each meal. It will pay for the extra trouble. Individual water basins for each cow are a profitable arrangement. The cow, like most human beings, likes to drink as she eats.

COW COMFORT.

To do her best the cow should be made comfortable. This means that she be confined in a well ventilated whitewashed stable which is warm enough not to freeze as long as the thermometer stays above zero. Above all she should not be compelled to lie in manure until both sides are plastered.

Milk is the only food product in the world that some people think a little cow-manure, more or less, in it does no harm. Contrary to popular opinion it will not "all strain out."

CARE OF PRODUCT.

Much milk and cream is spoiled after it is produced. Don't allow it to stand in the stable. It gathers odors. Patrons of creameries who use gathered cream should be extra careful in winter time. Take your cream to the creamery at least twice a week. Don't allow it to freeze; freezing imparts a bitter flavor. Neither should it be kept by the kitchen stove until it becomes so warm that it turns rancid and takes on the numerous odors of the kitchen. Keep in a cool airy room where the temperature is a few degrees above freezing.

If you observe these precautions the creamery manager will call you blessed.

REGULARITY IN FEEDING AND MILKING.

The cow should be milked at regular hours. She is a creature of habit. This does not mean to milk at exactly 12 hours apart but it means that

whatever hours you adopt for convenience in milking you should stick to them each day.

Cows should be fed twice a day. I have always got the best results by feeding just before milking although many oppose this plan. Harsh words, blows or any excitement in the stable will materially affect both quantity and quality of milk.

CARE AT CALVING.

The cow should have a warm box stall for calving. Watch for milk fever. It is quite prevalent in the Fall. It generally occurs within 48 hours after calving. Do not milk the cow out dry for the first 48 hours after calving. The first symptoms of milk fever is failure to eat. If this is noticed don't wait for any more symptoms. Get busy at once. Pump up the udder hard with air. The cow generally goes down unconscious. Do not give medicine to her in this state. It will run into her lungs and drown her. The air treatment will cure nine cases out of ten, the medicine treatment will kill nine out of ten. Don't give salts, they are weakening.

FINALLY.

Don't let the cows stand humped up in the barnyard when the thermometer is below 30°. It takes more feed to warm them up and feed is an expensive fuel, besides they will give less milk.

PRODUCTION OF CLEAN AND SOUND MILK.

BY C. V. JONES, STATE DAIRY INSPECTOR.

In the production of clean sound milk many factors are to be considered. It is not enough that milk be rich in solids and fat, but milk must also be clean and, as far as possible, free from all undesirable bacteria.

In the manufacture of cheese the cheese-maker guides the milk and curd through a series of fermentations which change the perishable milk into a fairly staple food product (requiring of course, as do all foods, due care and protection).

In the manufacture of the best articles, good raw material is essential. Hence, for good cheese or butter, good milk is required. Now provided a good milk is furnished, a capable maker can set up the necessary fermentations, and so guide them as to insure a first class finished product. On the other hand if the cheese or butter maker is provided with milk in which probably many kinds of fermentation have already set in, many of which are undesirable in character, the maker's problem becomes greater, for he not only has to set up the necessary fermentations, but suppress the undesirable ones. At least 75% of the taints or defects of cheese and butter can be attributed to undesirable fermentation already under way in milk when brought to the factory, but often undetected by the crude tests applicable at the weigh stand. The other

25% of defects of cheese and butter must be ascribed to the makers and the factory, and these are fast being eliminated by the system of inspection in vogue, by the adoption of more scientific methods of handling the product, by greater attention to sanitation, and by the weeding out of incompetent makers. It is a deplorable fact that notwithstanding much money is spent yearly in the endeavor to assist the producer of milk in the production of better and cleaner milk, less rapid and satisfactory progress is being made in eradicating the taints and defects due to unsanitary conditions at the farm. No matter how few may be the producers of unclean milk in a given community, these few can be the means of tainting all the milk which reaches the factory when the whole is mixed in one vat. Hence the importance of the producers of wholesome milk cooperating with the cheese or butter makers in demanding that all milk be produced and handled under sanitary conditions. Like infectious diseases in men or animals, these undesirable fermentations, leading to taints or defects are due to bacteria, or, as some prefer to call them, germs or microbes. It is usually easier to prevent infectious disease than it is to cure disease itself, and a similar policy of prevention is essential in dealing with these taint producing bacteria in milk. Now the cheese and butter maker finds that certain kinds of bacteria are required in the manufacture of cheese and butter, but if these are not present they can readily be introduced in his starter or pure culture. We need not worry about these desirable bacteria; our worry is entirely about the taint producing forms.

No matter how cleanly we milk, we cannot keep the bacteria entirely out of the milk; but the cleaner we are, the fewer we undoubtedly will have. With great care we can get milk averaging in the mixed milk of a herd under 200 bacteria per CC. In order to secure milk of such a low bacteria content, strict attention must be paid to every detail, such as grooming of cattle, keeping stables perfectly clean and free from dust and cobwebs. The udders of cows should be carefully washed and dried before milking is started, but do not wash udders until you are ready to milk the cow as she may lie down and in so doing become dirty again. Never feed the cows hay or other dusty feed just before milking is started. The hands of the milker should at all times be carefully washed, and clean aprons donned, better still where at all practicable, a clean pair of overalls and clean smock should be worn when milking. Small mouthed milk pails should be used, and milk should, as soon as drawn from the cow, be carried out of the stable, strained through at least two layers of cheese-cloth and then quickly cooled at 50° F. or below and held at such a temperature until delivered at the factory.

The more careless the conditions of milking, the larger the number of bacteria there will be present at the end of milking, the mixed milk from the herd under careless milking will average from 15,000 to 60,000 bacteria per CC. In other words, take the same herd, and alter the conditions of milking, and you change the bacterial contents of the milk very materially. These added bacteria must then come from sources outside the udder, such as from the dirt and hairs of the cow, dust of milking place, from milker's hands or garments, or from milk pails and cans improperly cared for. Anyone or all of these may prove to be sources of seeding. Any dust or dirt containing manure particles or

particles of decomposing food, carries with it large numbers of bacteria of the taint producing type, tending indeed to lead to changes in the milk, such as have already set up in the manure or decaying food. Thus while it is not possible to obtain milk free from bacteria, we can by attention to cleanliness in all respects very materially reduce the numbers of undesirable bacteria. It is not enough to guard against undesirable bacteria finding its way into the milk while milking, but milk must be given clean and sanitary surroundings after it is drawn from the cows, as seeding can occur just as well after milking, as during milking if not properly protected. Hence, milk should at all times be thoroughly and quickly cooled to 50° F. or below, kept in a place free from dust, protected from flies and other insects, and from animals. By proper attention to cleanliness in milking and care after milking, the possibility of the milk being seeded with taint producing bacteria is very materially lessened. It has been time and again proven that these undesirable bacteria come mainly from "dirt" in some form—as manure-laden dust, dust from some decaying food matters, from remnants of whey or milk left in crevices or seams of cans or pails to ferment and decay.

The great importance of cooling milk quickly and thoroughly to a low temperature is manifested by the fact that to thrive and develop, bacteria require food, moisture and a suitable temperature. Food and water are present in abundance in milk. The milk as it leaves the animal's body is at the most favorable or suitable temperature for bacterial growth. Most types of bacteria found in milk continue to grow moderately well down to 65° F. Below 65° the growth slackens off until at 50° F. there is almost no growth for the first 24 hours of its age, and at 40° F. no growth for 60 to 72 hours. (2½ to 3 days). Hence it is possible to hold milk sweet and sound over Sunday and thus relieve the cheese or butter makers from Sunday work, which not only is his lawful, but just due.

In this age of money making, when so many questions are settled by the standard of "Will it pay," I want to point out that it has been shown clearly that it takes from one-half to three-quarters of a pound less milk to produce a pound of cheese, where milk was properly produced and cared for, than it does of milk not properly taken care of. Not only does it take less good sound milk to make a pound of cheese, but the finished product of such milk will at all times bring a higher price and its keeping quality is greatly enhanced.

Does it pay? Indeed it does. The reward will more than compensate for the labor, saying nothing of the pleasure and joy attendant upon the consciousness of producing a first-class article of food, and it is up to the dairyman to add the additional value to his product. Be clean. Keep cool.

CARING FOR CREAM AT THE FARM.

BY C. V. JONES, STATE DAIRY INSPECTOR.

The cream gathering system is fast becoming the popular system upon which to conduct the creameries of this state and in fact of the country at large, and while we cannot hope under this system to produce as fine a quality of butter as we could under the creamery separator system, yet we must not make this an excuse for not doing better than we are.

The question has often been and is still often asked, "Can as good butter be made from gathered cream as from cream separated at the creameries?" This question has been the means of arousing many of our best creamery men to the importance of giving the matter much careful study. Many answer "yes," while many answer "no." For my part I am inclined to answer that not until the cream producers are educated as to the best means of caring for cream at the farm, and also to the great importance of delivering the cream to the creamery more often, than is usually the case just now, we cannot hope to produce as fine a grade of butter as we did when the milk was delivered daily to the creameries and there skimmed, and the cream cared for under the direction of one specially trained man with the necessary appliances for caring for the cream. There is no doubt whatever that the quality of the butter depends very largely upon the quality of the cream from which it is made. One man, though not especially trained can and will handle a hundred patron's cream to better advantage than will the one hundred. How much better will a thoroughly trained and experienced man handle all the cream than will the one hundred though possessing equal ability. But the cream gathering system is in vogue, and I fear to stay, and it is up to all concerned to do the very most to make the very best of the matter. If the cream is properly handled at the farm we can yet produce a very satisfactory grade of butter from gathered cream.

What is good cream? I am sure that most buttermakers will say that good cream must be clean in flavor, sweet, smooth, and test from 28 to 32 per cent butter fat. There is no doubting that to make the finest butter the cream must be clean in flavor, free from lumps or curdy matter, and should reach the creamery containing not more than two-tenths of acidity by the alkaline test. Cream testing less than 25 per cent butter fat, and more than four-tenths of acidity can scarcely be said to be in the best condition for the manufacture of the finest butter.

In creameries where cream is pasteurized, as all cream should be, it should not contain more than two-tenths of acidity, nor less than 30 per cent butter fat. Old cream will never make the finest butter.

A short time ago I read from the Creamery Journal, a paper printed at Waterloo, Iowa, the speech of one of the wholesale butter dealers which he delivered to the buttermakers of South Dakota while in convention. It struck me as being very astounding indeed, and if what he

said was true, and we have no reason whatever to disbelieve his statement, it is up to the dairyman, and especially the dairyman who patronizes the cream gathering creamery, to sit up and take notice. His speech in part was: "I had an experience last summer such as I don't wish for again. I saw the grocers selling oleomargarine for twenty-eight cents (\$.28) per lb., while we had thousands of tubs of creamery butter that could not be moved at sixteen cents (\$.16) per lb. The consumers do not want poor butter; they would rather have substitutes."

There can be no doubt that most of the creamery butter, to which the above mentioned speaker referred, was the product of gathered cream.

We are hearing a good deal these days about legislating the "Oleomargarine Traffic," but it is the judgment of the writer that no better legislating can be enacted than that of producing such a fine quality of both creamery and dairy butter that the consumer will demand our goods.

The cream gathering creamery system is here, and as I said before, it is here to stay. Hence, it is up to all of us who are interested in the welfare of dairying to make the very best of the system possible. How shall we go about it? 1st. The producer of cream must see that sanitary conditions around the stable are as nearly perfect as possible. Stables should be kept perfectly clean, free from dust and cobwebs. Stables should have plenty of light and ventilation.

2nd. The milking should be done as cleanly as possible, by washing the udders of the cow just before milking, keeping her at all times well groomed. The hands and clothing of the milker should be as clean as circumstances will allow, and the milker should always milk with dry hands. Utensils used in the dairy should receive especial attention as to cleanliness, by being thoroughly washed in warm water to which some good cleanser has been added. Rinsed in hot water, then scalded, and exposed to the air and sunshine.

3rd. As soon as the milking is done the milk should be taken away from the stable and separated. The separator should never be in connection with the stable, nor in the kitchen. The cream screw of the separator should be set so as to skim not less than a 30 percent fat cream, not more than 40 percent fat cream. As soon as separating is done, cool the cream as low as 50° F. or lower and never add warm cream to cold cream. From the time cream is separated, until it is delivered to the creamery, it should be kept at a temperature not to exceed 50° F. For at least five months of the year, most of the dairymen will need to use ice, and the dairymen who does not own a good ice house and see that same is filled during the winter months with good clean ice can scarcely be said to be up to date. Every dairyman should build himself a good cement milk house, with a good cement tank that will hold from 5 to 10 gallon cans. The tank should be constructed with a water release so that water may be readily changed. The water tank should be kept around 40° F. With the use of ice this may be readily done in the hottest season of the year. Milk house must be kept perfectly clean and sweet, should have at least two windows with shades.

Separator should be taken apart, washed, and scalded each and every time it is used. This fact cannot be too strongly emphasized.

4th. Cream should be delivered to the creamery not less than four

times per week and for the months of July and August, cream should be delivered to the creamery daily, and should be delivered early in the day so as to escape the heat of the mid-day sun.

All cream should be delivered in individual cans, that is, each patron's cream should reach the creamery separately, this practice will give the buttermaker a chance to determine who is producing tainted or defective cream, and thus enable him to instruct such patrons as to the best methods of caring for the cream.

If we are to reach the zenith of the butter market, we must have continually ringing in our ears four words: "Be clean." "Keep Cool."

ADDRESS ON DAIRYING DELIVERED AT THE MICHIGAN PRESS ASSOCIATION AT DETROIT, JANUARY 19, 1912.

BY J. W. HELME, DEPUTY DAIRY AND FOOD COMMISSIONER.

If I were asked to produce some testimony or to show how dairying had helped Michigan I could do no better than to point to the bright and intelligent audience here present; a majority of whom were undoubtedly reared from infancy on the life-giving, health retaining, lacteal fluid of the meek and lowly cow and to a minority of whom even now (especially in the dry counties of the state) the milk of the brindle cow furnishes their strongest beverage.

From the milk shake of the dry counties to the milk punch of the wet ones, all classes of citizens unite in the consumption of the old cow's products. But I am to talk of dairying as a factor in building up Michigan and I want to say that there is no one interest in the state of Michigan that has brought such development to this state as the dairy industry. I will not even except those copper mines above the straits that are the wonders of all ages, one of which has produced more wealth than any other mine in the history of the world whether gold, silver or diamond.

I will not except our iron mines whose control by the steel trust gives it the dominating power in the markets of the world. Neither will I except our great automobile industry which has put mortgages on hundreds of homes in Michigan which the old cow will have to redeem.

There are four ways in which dairying is building up Michigan.

First: It benefits the farmer and likewise the community financially.

Second. It benefits the dairy man intellectually and likewise the community in which he lives.

Third: The dairymen today are the only class of farmers who are not depriving future generations of their inheritance by robbing the soil.

Fourth: And last. Dairying builds up a community morally. It makes for better manhood and better womanhood and higher ideals.

AS TO FINANCIAL BENEFITS.

The recent census returns show that Michigan is now the second state in the union in dairying, being exceeded only by the great state of New

York whose immense urban population creates an immense demand for dairy products. Scattered all over Michigan can be found on every hand the creamery, the condensery, the cheese factory, the milk depot. You who live in the town where these things are found know full well how the monthly milk check helps the town. In the county where I reside three condenseries pay the farmer monthly over one hundred thousand dollars.

Lenawee county is the oldest and largest dairy county in Michigan.

As shown by the figures of the census of 1900, (those of 1910 not yet being available), Lenawee county not only leads all other counties in Michigan in agricultural wealth produced, but exceeds every county in the union of equal size in the total amount of agricultural wealth produced and in fact every county in the union without regard to size, with the exception of a few western counties which have an area the size of some eastern states. The prosperity of Lenawee county comes from the large bovine population within its borders.

AS TO INTELLECTUAL BENEFITS.

There is no business in the state of Michigan that requires the intellectual force and ability to succeed as a good dairyman. Dairying is a scientific occupation. Science has done wonders for the cow owners, it is doing wonders yet. The up-to-date dairyman must be a reader, an investigator, a thinker. He must take and read newspapers and he does.

Something like twenty years ago a tramp printer came to Lenawee county. He started a paper in that home of dairying. His paper prospered. He sold out a few years ago for a sum that took five figures to express. He told me that he was going to go somewhere else, buy a paper cheap and do the same thing over again. After traveling over the country for a year he told me that he was afraid he had made a mistake in selling, that there was no community he had visited where the farmers read as many newspapers as in Lenawee county. He finally settled in the next county to ours which is catching the milk fever from us. In a somewhat strenuous existence of half a century I have followed the occupation of lawyer, editor and statesman, (politician they call it while you live) and none of these requires the brain and executive ability for success that is necessary to run my dairy farm. Not by the brains of the few but by the intellectuality of the masses will Michigan be lifted up in the future.

Dairying develops the intelligence and business ability of its followers and so benefits the entire community intellectually.

CONSERVATION OF THE SOIL.

All intelligent men now realize that the biggest subject not only before this country but the world is the conservation of soil fertility. We have been over-running a vast fertile new continent. We have practiced the most shameful and wasteful methods of agriculture the world has ever known. We have been soil robbers not true farmers. Go with me to any part of Michigan and I will show you run down farms and worn out lands.

While our population is increasing our yield per acre is decreasing. This condition spells disaster if it is not remedied. In this field the dairyman shines supreme. If a man sells a ton of timothy hay off the farm he sells elements of fertility that must eventually be replaced and will cost him \$7.00 to do so for each ton of hay sold. The man who sells a ton of butter off the farm sells fifty cents worth of fertility and this is replaced ten times over by the feed that every good dairyman buys. The dairyman with his clovers, cows and calves is the true conservationist.

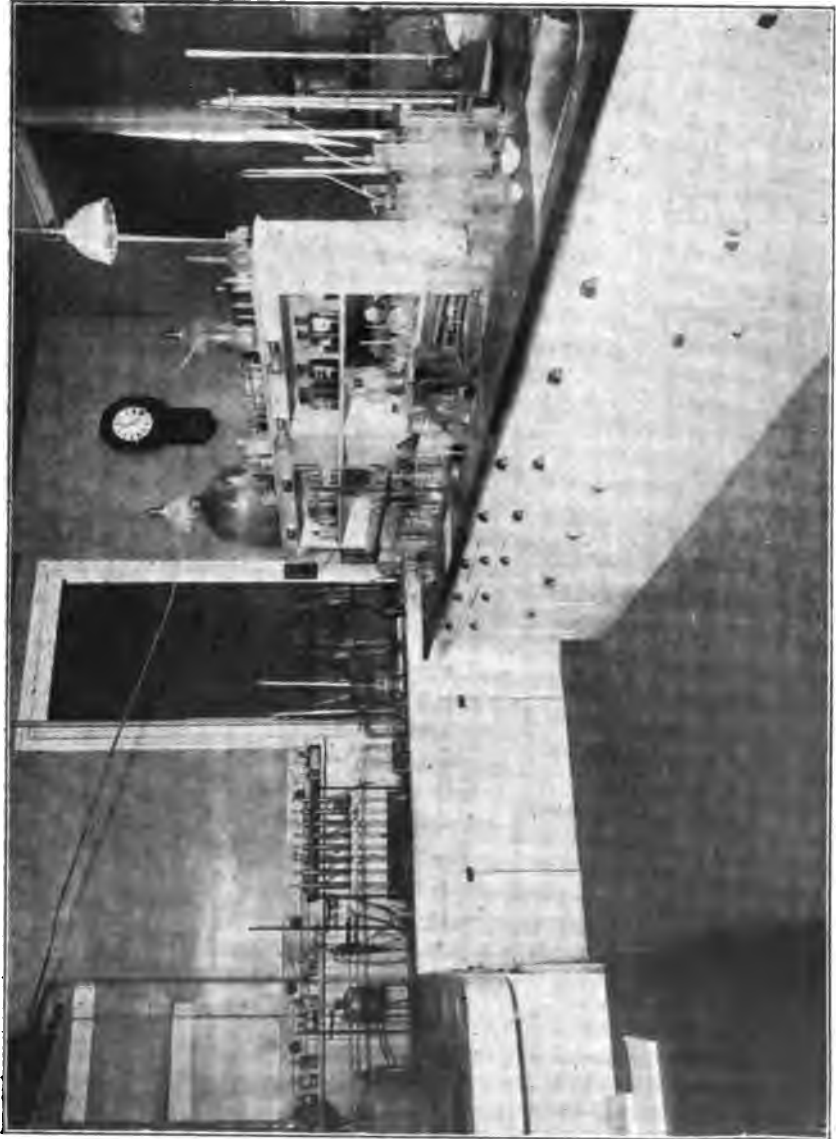
Ruins of ancient cities and dead civilization show what happens to the soil robbers. When our soils cease to produce food at a reasonable price for the masses, what will happen to your great factories and business houses in this magnificent city the pride of Michigan. The Michigan dairyman today stands between you and a future food shortage.

The last census shows that while our population has increased 20 per cent, hogs, sheep and calves show heavy declines in numbers over ten years ago; only dairy cows holding their own.

THE MORAL UPLIFT OF DAIRYING.

No person can associate with cows and be a successful dairyman without broadening out in human sympathy and affection. It is the sentimental side of dairying that has always appealed to me the strongest. It is the oldest and most important occupation in the history of the race. It is not recorded Adam was a dairyman or in fact did anything else except to get into trouble but Cain and Abel must have done some milking. When Moses sent spies to investigate the promised land they reported it to be flowing with milk and honey. Notice that the milk comes first. What could have been more appropriate than that the Savior of our race was born in a cow manger. Is it not possible that that great broad love for the human race was acquired when the infant Jesus looked into the great brown eyes of the meek and lowly cow in that Judean dairy. For the cow is the great foster mother of the human race. From the dawn of history the cow has been with us, she has generously furnished enough milk to bring up all of her babies and part of ours. When our Aryan ancestors dwelt in tents she was with us. Of all God's greatest gifts to us she is the greatest and most important, to her we owe the most.

Blot out the cow from human industry and grass would grow in the streets of our great cities. 75 per cent of our freight trains would cease operation, 50 per cent of our laborers would draw no pay on Saturday night and our tables would be bare of the greatest luxuries we now enjoy. For there is not a thing about the cow living or dead that we do not utilize. We use her horns to comb our hair, her skin clothes our feet, her hoofs make glue and her tail makes soup, her blood makes our sugar white and her flesh is the greatest meat of all nations. She has gone with man from Plymouth Rock to Golden Gate. It was her sons that broke the first sods in the settlers clearing. It was her sons that drew the prairie schooner of the sturdy pioneers when they pushed the star of empire westward, and the old cow grazed along behind and when the day's march was done she came and gave the milk to fill the mother's



LABORATORY NO. 2.

breast to feed the suckling babe that was perchance to become an editor and a leader of men. The editor may be a great man and a moulder of public opinion but he is not as important to the human race as the old cow. The dairy business is the only one to which you should give free advertising.

Fellow editors let us stand by the honest cow, and verily we shall have an abundance of cash subscribers, genuine butter for our bread, milk for our babies—and the earth and the fullness thereof shall be ours.

THE DETECTION OF FORMIC ACID IN FRUIT PRODUCTS.

BY F. L. SHANNON.

In Bulletin No. 195, of the Dairy and Food Department of the State of Michigan, the author called attention to the fact that formic acid was being used in this country as a preservative of fruit products.

It has been the general belief among chemists for some time, that some preservatives other than the ones ordinarily found were being used in the preservation of fruit products and investigations have been made in various laboratories throughout the country for the purpose of determining the identity of the substance used. Owing to its use in Germany a number have suspected formic acid and have built up their investigations with that substance in mind, but because of unsatisfactory and indirect methods of identification and further owing to the fact that many substances respond to these indirect methods, it has been difficult to reach a positive conclusion.

A search of the literature on the subject revealed the fact that the detection of formic acid did not depend upon its isolation and subsequent identification, but mainly upon the indirect method of its reducing power, principally upon silver nitrate and mercuric chloride solution. For example, the older literature states that formic acid is a constant constituent of many plant and animal products, a statement based on the fact that when they are subjected to steam distillation some substance is obtained in the distillate which reduces silver nitrate and mercuric chloride solution. However, in view of recent investigations along this line, it seems that this whole subject of the natural occurrence of formic acid needs further study, as it has been found possible to subject a host of substances which were known to contain no formic acid to steam distillation and obtain a distillate which gave a pronounced reduction with both silver nitrate and mercuric chloride solution. From none of these substances however has it been possible to isolate and identify formic acid as such. Therefore, it is evident that we are not justified in designating as formic acid every substance obtained by steam distillation which reduces silver nitrate and mercuric chloride solution. It was found, for example, that when phosphoric acid was subjected to distillation the distillate possessed the reducing properties generally ascribed to formic acid. Furthermore, in a number of methods in which the formic acid recovered by steam distillation is neutralized using

phenolphthalein as indicator, the indicator itself was found to have a reducing action on mercuric chloride.

One of the most satisfactory indirect methods for the detection of formic acid is based on its reduction to formaldehyde by means of magnesium and dilute sulphuric acid. Fenton has shown that carbonic acid may be reduced in the same way, but Bacon has called attention to the fact that this is of theoretical importance only, there being no danger of confusing the two in practice. However every step in this method must be carried out with absolute precision, or erroneous conclusions may be drawn.

The qualitative method as applied to the products used in this investigation is as follows: To about 200-500 cc. of the syrup or crushed fruit in a two litre, long necked, round bottom flask provided with a Reitmeier bulb, add about 50-100 cc. of water. Subject to steam distillation, collecting the distillate usually about 2500 cc. until it ceases to give an acid reaction with litmus.

Exactly neutralize the distillate with N/1 NaOH using litmus as an indicator. Evaporate on a steam or water bath to about 50 cc., transferring from the large evaporating dish to smaller ones as the volume decreases. Transfer to an Erlenmeyer flask, provided with a glass tube about three feet long as an air condenser, add a few pieces of pure magnesium ribbon or wire and a slight excess of dilute sulphuric acid and set in a cool place for one hour, adding dilute sulphuric acid through the tube from time to time as the reaction ceases. Transfer the liquid to a suitable distilling flask and collect the first ten cc. of the distillate, which will contain most of the formaldehyde, if the original syrup contained formic acid.

There are a number of methods published for the detection of formaldehyde and nearly every analyst has his favorite test. However, the methods which proved the most satisfactory in this work were, Leach's method,¹ Phloroglucinol method,² Rimini's method,³ and the Rescorcin method of the United States Pharmacopoeia. A positive reaction with these four tests was considered exclusive evidence of the presence of formaldehyde.

CRYSTALLOGRAPHIC IDENTIFICATION.

In as much as practically all methods for the detection of formic acid previously reported are indirect methods depending upon the decomposition of the formic acid or upon its reducing powers, it seemed desirable to attempt the isolation of formic acid in the form of an insoluble salt.

The usual procedure in determining the identity of an organic acid in plants is to prepare some readily crystallizable salt, sparingly soluble in water. Of the various formates the lead salt crystallizes readily without water of crystallization, is very stable and requires 63 parts of water for solution. The formation and identification of lead formate would therefore constitute a direct and positive proof of the presence of a formic acid. After numerous attempts the following procedure was adopted:

¹ Bull. 107, p. 185, U. S. Dept. Agr. Bur. of Chem.

² Ibid.

³ Ibid.

Steam distill about 1000-1200 cc. of the syrup as in the first operation, collecting the distillate (2500-3000 cc. in a receiving flask to which about 5 cc. of lead cream has been added.) (This is made as follows: Precipitate a solution of lead nitrate with potassium or sodiumhydrate in the presence of phenolphthalein until a faint pink color appears. Wash by decantation 8-10 times.) Shake the flask occasionally and as the lead hydrate is dissolved add a few cc. more, until all of the formic acid is combined. Concentrate the liquid in a large dish on a steam or water bath to about 50 cc. Filter and transfer to a suitable crystallizing dish and set aside in a desiccator. If formic acid was present in the original material needle like crystals of lead formate will form. Wash the crystals with absolute alcohol, to remove any lead acetate which may be present, spread on filter paper and dry. To the dry crystals apply the following tests:

- (a) Aqueous solution will reduce Ag No₃ upon warming.
- (b) Aqueous solution will reduce mercuric chloride solution upon warming.
- (c) Aqueous solution will reduce platinum chloride upon warming.
- (d) To a portion of the crystals in a dry test tube add Sulphuric acid and warm. Carbon monoxide is generated which will burn in the tube with a blue flame when ignited. Further note that the lead formate is not discolored.
- (e) Transfer some of the crystals to a small distilling flask, treat with conc. phosphoric acid and distill. The distillate which is formic acid will react as follows:

- 1. Acid to litmus and acid taste.
- 2. Reduces silver nitrate on warming.
- 3. Reduces mercuric chloride on warming.
- 4. Reduces platinum chloride on warming.
- 5. Is reduced to formaldehyde by magnesium and dilute sulphuric acid.

As previously mentioned it was found that when phosphoric acid and water alone were distilled the distillate would reduce silver nitrate and mercuric chloride solution. Therefore, before test (e) was carried out the phosphoric acid was subjected to distillation until it no longer gave a distillate that would reduce silver nitrate or mercuric chloride. The crystals of the lead compound were then added and the distillation continued.

Although the chemical evidence that the volatile acid obtained from the fruit products used in this investigation is conclusive, it was thought desirable to submit the crystals to Dr. Edward H. Kraus, Professor of Geology and Minerology, University of Michigan, and he reports as follows:

"The crystals which were examined crystallographically, were obtained by slow crystallization from an aqueous solution of the material furnished by Fern L. Shannon, State Analyst, Lansing, Michigan. They are prismatic in habit and about 2 to 3mm. in length and of slightly yellowish color. All crystals were clear and transparent. Although the crystals were in general doubly terminated, readings were made only upon the faces of the prism zone, the end faces being extremely

small and, hence difficult of adjustment. The images obtained were very good considering the size of the crystals.

The measured angles, compared with the values given by Plathan¹ for are as follows:

	Kraus.	Plathan.
m : m (110) : (110)	73° 26'	73° 28'
m : b (110) : (010)	53° 17½'	53 16'

This comparison shows that the agreement in the values for this material and those given by Plathan¹ for lead formate are exceedingly close.

Parallel extinction was observed upon all the faces examined. The indices of refraction are higher than that of methyleze iodide, as determined by the Becks and the Schrodder van der Kolk methods.

The above crystallographic-optical properties, together with the fact that a distinct reaction for lead is easily obtained upon the plaster tablet with the blowpipe, indicates conclusively that the substance examined is lead formate."

To further substantiate the proof a number of fruit syrups that were known to contain no added formic acid were subjected to steam distillation and an attempt made to separate a lead compound. In some instances a few crystals were obtained, but at no time could the crystals give the characteristic tests for lead formate.

It would seem then that the formation of formaldehyde coupled with the formation of lead formate and their subsequent identification would furnish a conclusive and positive proof of the presence of formic acid.

The author desires to take this opportunity to thank Dr. Edward H. Kraus for his cooperation in this work.

MICHIGAN DAIRY AND FOOD DEPARTMENT.

March 19th, 1912.

DAIRY MEETINGS.

During the year sixty educational dairy meetings have been held in the state at the following places: Cadillac, Traverse City, Elk Rapids, East Jordan, Muskegon, Orleans, Lawrence, Lapeer, Shelby, Detroit, Kalamazoo, Imlay City, Port Huron, Alpena, Lake City, Millersburg, Onaway, Towar, Indian River, Wolverine, Vanderbilt, Gaylord, Frederick, Roscommon, St. Helen, West Branch, Alger, Sterling, Standish, Pinconning, Gladwin, Linwood, Kawkawlin, Fosters, Burt, Montrose, Flushing, Lennon, Carland, Elsie, Ashley, North Star, Ithaca, Traverse City, Alma, Forest Hill, Shepherd, Rosebush, Mount Pleasant, Clare, Farwell, Lake George, Temple, Marion, McBain, Boon, Harrietta, Mesick, Pomona, and Copemish.

All were addressed by the Deputy Commissioner who reports a growing interest in intelligent and scientific dairy work throughout the state.

¹ Grothe, Chem'sche Krystallographic, 1910, 3. 16.

To the Hon. G. M. Dame, Dairy and Food Commissioner of the State of Michigan:

Sir:—I have the honor to submit to you herewith, as required by law, the accompanying report for the fiscal year ending June 30th, 1912.

My duties during the year have required me to visit Shiawassee, Ingham, Bay, Saginaw, Eaton, Ionia, Barry, Cass, Clinton, Kent, Van Buren, Kalkaska, Antrim, Charlevoix, Emmet, Grand Traverse, Manistee, Benzie, Berrien, Newaygo counties. At Shiawassee county six colonies were examined and three found to be diseased. Ingham county, 108 examined and 6 diseased; Bay, 89 examined, all healthy; Saginaw, 48 examined and 1 diseased; Eaton county, 162 examined and 11 diseased; Ionia, 406 examined and 2 diseased; Barry county, 43 examined and 29 diseased; Cass, 484 examined and 77 diseased; Clinton 260 examined and 37 diseased; Kent 725 examined and 36 diseased; Van Buren, 100 examined and 65 diseased; Kalkaska, 370 examined and 14 diseased; Antrim county, 643 examined and 18 diseased; Charlevoix, 420 examined and 27 diseased; Emmet, 81 examined and 49 diseased; Grand Traverse, 17 examined and 1 diseased; Manistee, 71 examined and 51 diseased;

INSPECTION OF

Name.	Location.	Owner or manager.	Yearly milk receipts pounds.	Make butter, pounds.	Sanitary surroundings.
Calhoun Co., January:					
Milk Producers Co.....	Battle Creek.....	F. M. Sullivan.....			Medium
W. H. Brown.....	Battle Creek.....	W. H. Brown.....			Good...
Sanitarium Creamery.....	Battle Creek.....	Dr. J. H. Kellogg.....		73,000	Good...
Macomb County, January:					
New Baltimore Creamery Co.....	New Baltimore.....	C. P. Marcero.....			Good...
Monroe County, January:					
Azalia Skimming Station.....	Azalia.....	Clayton Auten.....			Good...
Hillsdale County, February:					
Hillsdale Elgin Creamery Co.....	Hillsdale.....	F. M. Smith.....	969,000	251,000	Good...
Macomb County, February:					
Chesterfield Creamery Co.....	Chesterfield.....	C. F. Jordan.....	2,420,326	483,874	Fair....
The Gats Creamery Co.....	Mt. Clemens.....	J. F. Gats.....	223,250	85,000	Fair....
New Baltimore Creamery Co.....	New Baltimore.....	C. P. Marcero.....	1,869,282	80,469	Fair....
Midland County, February:					
Coleman Creamery Co.....	Coleman.....	C. H. Keyworth.....	688,000	207,672	Good..
Oakland County, February:					
Pontiac Cooperative Creamery Co.....	Pontiac.....	F. C. King.....	2,164,000	107,108	Good...
Washtenaw County, February:					
Geo. Currie Milk Depot.....	Ann Arbor.....	Geo. Currie.....			Good...
Ypsilanti Dairy Association.....	Ypsilanti.....	S. A. Wiard.....	9,019,801	3,640,178	Good...

Benzie, 227 examined and 59 diseased; Berrien, 166 examined and 13 diseased; Newaygo, 47 examined and 15 diseased; Jackson, 171 examined and 82 diseased.

European Foul Brood was found to exist in the counties of Barry, Berrien, Newaygo and Cass. In all cases instructions were given as to the necessary course to be pursued for the successful treatment of the disease, and as a rule owners of diseased bees were not only willing but anxious to follow instructions.

GARRY E. SANDERS,
State Apiary Inspector.

INSPECTIONS—HOW REPORTED.

Inspections of creameries, cheese factories, farm dairies and city milk supply are reported in the bulletins issued by the Department. By way of explanation the following pages are reprinted from a monthly bulletin. These bulletins, containing reports of inspections as shown on the pages reprinted, will be mailed to parties applying for same.

CREAMERIES.

Condition of apparatus.											Quality of milk.	Score of butter.
Sample bottles.	Pumps.	Heater.	Separator.	Pasteurizer.	Valve.	Skim milk tank.	Piping.	Churn.	Engine.	Boiler.		
Good	Good			Medium			Good	Good			Medium	
Good			Good	Good	Good		Good	Good	Good	Good	Good	
Good				Good			Good	Good	Good		Fair	
Fair	Good		Fair		Good	Clean	Good	Good	Good	Good	Good	
Good	Good		Good							Good	Fair	
Good	Good	None	None		Good		Good	Good	Good	Good	Good	90
Good	Good	Fair	Good	Fair	Good	Good	Fair	Medium	Good	Good	Good	92
Good	Fair	Fair	Good	Fair	Good	Good	Good	Fair	Good	Good	Good	85
Fair	Fair	Fair	Good		Good	Good	Fair	Bad	Good	Good		88
Fair	Good			Good	Fair		Fair	Good	Good	Good		89
Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good		90
Good	Good	Good	Good	Good	Good	Good	Good		Good	Good	Good	96

INSPECTION OF

Name.	Location.	Owner or manager.	Yearly milk receipts.	Make cheese.	Style.
Gratiot County, January:					
Perrinton Cheese Factory	Perrinton	A. Dear .....	.....	.....	Soft Michigan.
Hillsdale County, January:					
Adam Cheese Factory	Pittsford	M. N. Hinckley .....	.....	.....	Soft Michigan.
Osseo Cheese Factory	Osseo	M. N. Hinckley .....	.....	.....	Soft Michigan.
Pittsford Cheese Factory	Pittsford	M. McCurdy .....	.....	.....	Soft Michigan.

CHEESE FACTORIES.

Cheesemaker.	Sanitary surroundings.	Equipment.						Quality of milk.	Starter.
		Vats.	Presses.	Curd milk.	Whey tank.	Rennet lost.	Boiler.		
Albert Allen	Good ..	2, good ..	2		Fair			Fair ..	Natural.
Harry Eldridge	Good ..	2, good ..	2		Fair		6 H. P.	Good ..	
Harry Eldridge	Good ..	2, good ..	2		Fair		4 H. P.	Fair ..	
M. McCurdy	Good ..	1, good ..	1		Fair				

Name.	Postoffice.	Patron of.	Total number of cows.	Number cows giving milk.	Daily production of milk in pounds.	Breed.
Calhoun Co., January:						
W. K. Adams.....	Battle Creek	Raymond & Fagan Milk Depot	12	11	245	Mixed
E. D. Andrus.....	Battle Creek	Gartner Baking Co.	8	7		Mixed
C. F. Beach.....	Battle Creek	Milk Producers Co.	19	12		Mixed
G. R. Beardsley.....	Battle Creek	Geo. Blake Milk Depot.	7	7		Mixed
Walter Betterly.....	Battle Creek	F. E. Mellen.....	8	5		Mixed
George Blake.....	Battle Creek	Self milk dealer	12	8		Mixed
Myron L. Briggs.....	Battle Creek	Geo. Blake Milk Depot.	9	5	120	Mixed
M. J. Bryant.....	Ceresco	Milk Producers Co.	9	9		Mixed
E. J. Butler.....	Battle Creek	E. J. Warren Milk Depot.	12	9		Mixed
F. Cantrell.....	Battle Creek	J. D. Eccles.....	9	3		Mixed
Henry Coe.....	Battle Creek	Clifton & Bismarck Hotels.	9	7		Mixed
C. G. Convis.....	Battle Creek	E. J. Warren Milk Depot.	20	18		Mixed
Arthur Curtis.....	Battle Creek	Milk Producers Co.	12	9		Mixed
Wm. Eddy.....	Battle Creek	Brown Creamery	5	4		Mixed
Geo. Everett.....	Battle Creek	Raymond & Fagan Milk Depot	18	9		Mixed
T. D. Fenn.....	Battle Creek	Milk Producers Co.	43	32		Mixed
W. S. Fruin.....	Battle Creek	G. J. Wolf Milk Depot	17	14	250	Mixed
Vail Fuller.....	Battle Creek	J. D. Eccles.....	5	3		Mixed
W. Goodenough.....	Battle Creek	J. D. Eccles.....	22	14		Mixed
Vern Greenman.....	Battle Creek	Geo. Blake Milk Depot.	7	5	120	Mixed
Geo. Harrer.....	Battle Creek	Frank Young Milk Depot	12	11	144	Mixed
Archie Henry.....	Battle Creek	J. D. Eccles.....	16	2		Mixed
Dorr Hiseock.....	Battle Creek	Johnson Milk Co.	13	11		Mixed
W. J. Kirpatrick.....	Battle Creek	J. D. Eccles.....	10	6		Mixed
J. Krum.....	Battle Creek	Milk Producers Co.	10	10		Mixed
E. Lean.....	Battle Creek	C. F. Utley Milk Dealer.	18	15		Mixed
Fred Legge.....	Battle Creek	Milk Producers Co.	6	5		Mixed
H. A. Markham.....	Battle Creek	Milk Producers Co.	8	5		Mixed
Frank Minger.....	Battle Creek	Ruben Richards Milk Depot.	10	9	150	Holstein
W. D. Minor.....	Battle Creek	Milk Producers Co.	19	18		Mixed
C. E. Minor.....	Battle Creek	Milk Producers Co.	5	4		Mixed
J. A. Myers.....	Battle Creek	Milk Producers Co.	8	6		Mixed
Lee Perrigo.....	Battle Creek	Raymond & Fagan	15	11		Mixed
Geo. Peet.....	Battle Creek	Raymond & Fagan	15	13		Mixed
Post L. and Co.....	Battle Creek	Post Tavern	30	26		Mixed
Allie J. Potter.....	Battle Creek	G. J. Wolf Milk Depot.	23	19	420	Jersey-Mixed.
Frank Quins.....	Battle Creek	F. E. Mellen Depot.	8	5	50	Mixed
Chas. Reid.....	Battle Creek	J. D. Eccles.....	8	6		Mixed
John Rolfe.....	Battle Creek	Milk Producers Co.	23	19	400	Mixed
A. W. Russell.....	Battle Creek	F. E. Mellen.....	3	2	28	Mixed
A. W. Russell.....	Battle Creek	F. E. Mellen.....	5	3		Mixed
Wm. Seamans.....	Battle Creek	Frank Young Milk Dealer.	12	9		Mixed
S. A. Stevens.....	Battle Creek	J. D. Eccles.....	3	3		Mixed
Edward Towler.....	Battle Creek	Geo. Blake Milk Depot.	5	3		Mixed
H. E. Whitbeck.....	Ceresco	E. J. Warren Milk Depot.	24	14		Mixed
Geo. Whitbeck.....	Ceresco	E. J. Warren Milk Depot.	8	3	40	Mixed
A. J. White.....	Battle Creek	Milk Producers Co.	14	8		Mixed
J. M. Willison.....	Battle Creek	C. J. Wolf Milk Depot.	27	19		Mixed
Geo. B. Willard.....	Battle Creek	Browns Creamery.	11	10		Mixed
John Wood.....	Battle Creek	Raymond & Fagan Milk Depot	8	7		Mixed
Chas. Woodruff.....	Battle Creek	Sanitarium Creamery	10	9		Jerseys.
Grafton Co., January:						
Henry Baker.....	Perrinton	Perrinton Cheese Factory	3	3	35	Grades
Frank Ennis.....	Middleton	Perrinton Cheese Factory	4		40	Grades
W. M. Martin.....	Perrinton	Perrinton Cheese Factory	9	3		Grades
John McPerson.....	Middleton	Perrinton Cheese Factory	4	2	35	Grades
J. Teachworth.....	Perrinton	Perrinton Cheese Factory	6	4		Grades
John Wang.....	Perrinton	Perrinton Cheese Factory	3	1		Grades

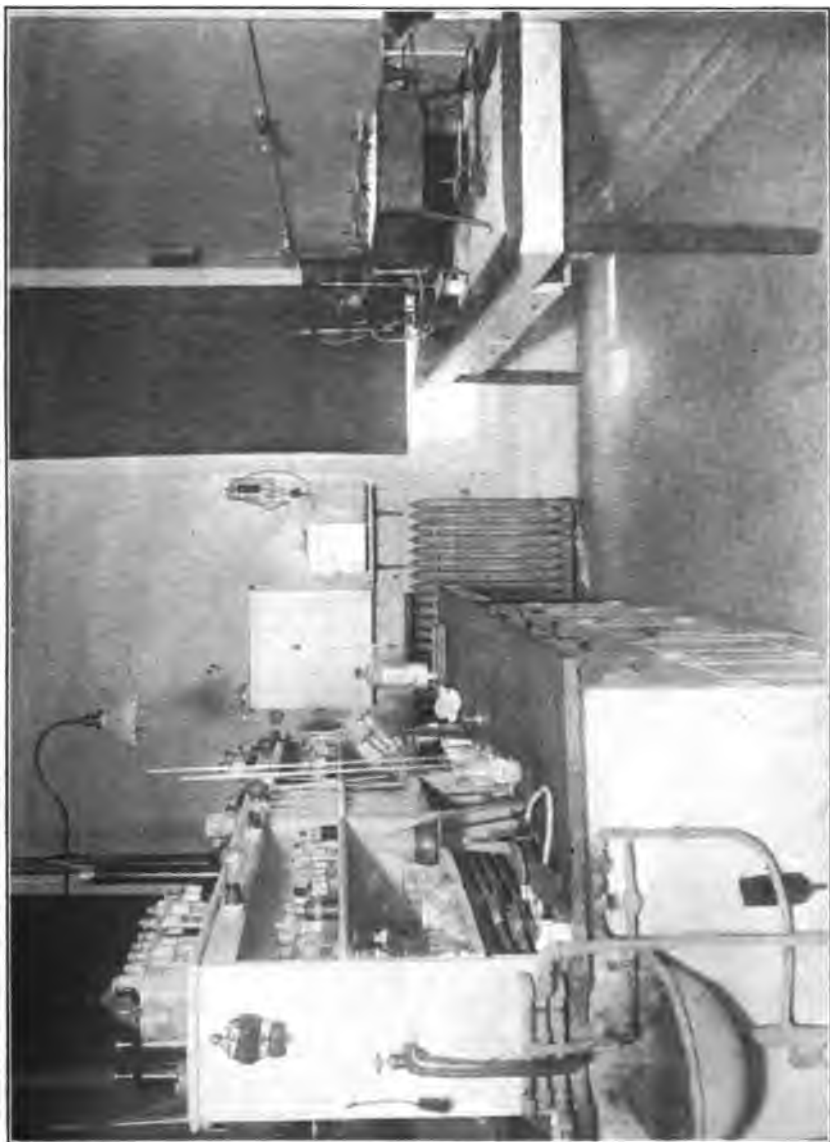
OF DAIRIES.

Ration.	Stable.		Cows kept clean.	Water.
	Ventilation.	Light.		
Silage, corn, hay, meal corn, oats	Trap door and hay chute	No	Yes	Drive well.
Hay, fodder, corn, oats, bran	Door and chutes	Fair	Yes	Drive well.
Barley, bran, cottonseed meal	Doors, windows, openings	Fair	No	Drive well.
Silage, cornfodder, cottonseed	None	No	No	Drive well.
Silage, hay, cottonseed meal	Trap door, doors, windows	Yes	No	Drive well.
Silage, hay, bran, barley	Door, windows	Yes	Yes	Drive well.
Silage, cornfodder, brewers grains	Cracks in building	No	No	Drive well.
Silage, hay, cottonseed meal	Door and windows	No	No	Drive well.
Hay, cornfodder, corn, bran	Doors, windows, chute	Fair	No	Drive well.
Fodder, hay, corn, oats	Doors, windows, chute	Fair	Yes	Drive well.
Hay, cornfodder, corn, oats	Trap door	No	Medium	Drive well.
Silage, Postum Cereal feed	Hay chute	Yes	No	Drive well.
Hay, fodder, corn, oats	Doors, windows	Fair	No	Drive well.
Hay, fodder, corn, oats, bran	Cracks in building	No	Medium	Drive well.
Silage, hay, corn, oats	Doors, windows, chutes	Yes	Yes	Drive well.
Silage, fodder, bran, corn	Chutes	Fair	Yes	Drive well.
Silage, hay, corn, oats, bran	Hay chute	No	Yes	Drive well.
Fodder, corn, bran	Doors, windows	Fair	No	Drive well.
Silage, hay, corn, oats, malt	Doors, chute	Medium	Yes	Drive well.
Fodder, bran, corn	Cracks in building	No	No	Drive well.
Silage, hay, corn, oats	Cracks in building	Medium	Medium	Drive well.
Fodder, hay, corn, oats	Doors, windows, chute	Fair	Fair	Drive well.
Silage, fodder, hay, bran	Cracks, windows, doors	No	No	Drive well.
Fodder, hay, corn, bran	Doors, windows	Fair	No	Drive well.
Fodder, hay, corn, oats	Doors	Fair	Yes	Drive well.
Silage, hay, corn, oats	Doors	Yes	Yes	Drive well.
Fodder, hay, corn, oats	Trap door	Fair	Yes	Drive well.
Hay, fodder, corn, bran	Cracks in building	No	No	Drive well.
Silage, hay, corn, bran, oats	Hay chute	No	Yes	Drive well.
Fodder, hay, corn, oats, bran	Hay chute	Fair	Yes	Drive well.
Fodder, hay, corn, oats	Doors, windows, chute	Fair	Fair	Drive well.
Hay, fodder, corn, oats	Cracks, windows, doors	No	No	Drive well.
Silage, hay, corn, oats	Doors, windows, chute	Yes	Yes	Drive well.
Hay, fodder, corn, oats	Door	No	Yes	Drive well.
Silage, fodder, hay, bran	King system ventilation	Yes	Yes	Drive well.
Silage, hay, corn, oats	King system ventilation	Fair	Yes	Drive well.
Silage, hay, corn, oats	Chute and cracks	No	Medium	Drive well.
Fodder, silage, corn, bran	Cracks in building	No	No	Drive well.
Silage, fodder, corn, oats	Doors and windows	Yes	Medium	Drive well.
Hay, fodder, corn, oats, bran	Windows	Fair	No	Drive well.
Hay, corn, oats, bran	Windows, cracks	Fair	No	Drive well.
Silage, hay, corn, oats, bran	Cracks in building	Yes	Yes	Drive well.
Fodder, corn, oats, bran	Cracks in building	No	No	Drive well.
Silage, fodder, bran	Cracks in building	Medium	Yes	Drive well.
Silage, cornfodder, cottonseed	Trap door	No	No	Drive well.
Silage, cornfodder, corn, oats	Cracks in building	Fair	No	Drive well.
Silage, hay, corn, oats	Doors, windows	No	Fair	Drive well.
Hay, silage, corn, oats, bran	Doors, windows	Yes	Yes	Drive well.
Hay, cornfodder, corn, oats	Doors, windows, hay chute	Medium	No	Drive well.
Hay, fodder, corn, oats	Doors, windows	No	Yes	Drive well.
Silage, corn, oats	Doors, windows	Fair	Yes	Drive well.
Corn stalks, beans, straw, corn	Door	No	Fair	Tubular well.
Corn stalks, hay, corn, oats, bran	Door and window	Fair	Yes	Tubular well.
Corn stalks, hay, straw, corn	Door and window	Fair	No	Tubular well.
Cornfodder, corn, oats	Door and window	Fair	Yes	Tubular well.
Cornfodder, corneob meal, bran	Door and window	Fair	Yes	Tubular well.
Cornfodder	Door and window	Fair	Yes	Tubular well.

STATE OF MICHIGAN.

INSPECTION OF CITY MILK SUPPLY.

Name.	Health of herd and its protection.	Cleanliness.	Construction and care of utensils.	Health of employees and manner of milking.	Handling of milk.	Total.	Sanitary conditions.	Quality of milk.			
								Per cent butter fat.	Lactometer.	Total solids.	Solids not fat.
Ann Arbor, Mich., January:											
Del Begole	91	89	50	75	83	388	Poor.				
L. G. Bird	66	65	68	70	91	360	Poor.				
J. T. Gordon	63	70	68	68	88	357	Poor.				
F. C. Heiringer	66	75	71	71	87	370	Poor.				
Wm. Kappler	69	67	74	65	90	355	Poor.				
James McCalla	76	85	83	80	95	419	Medium.				
John O'Hara	77	85	72	74	93	401	Medium.				
Geo. Read	76	75	65	72	80	373	Poor.				
Chas. W. Rose	79	85	74	86	93	417	Medium.				
W. S. Smith	72	65	68	68	80	353	Poor.				
G. A. Waterman	94	97	78	97	98	464	Good.				
Battle Creek, Mich., January:											
W. A. Adams	85	60	85	85	100	445	Medium.	3.6	33.5	12.6	9.095
Ed. D. Andrus	80	85	85	85	100	435	Medium.	3.9	32.5	12.8	8.905
Carl F. Beach	70	55	85	75	100	385	Poor.	3.2	32	11.84	8.64
G. R. Beardsley	70	60	85	85	100	400	Medium.	4.2	32	13.04	8.84
Walter Batterly	77	65	85	80	100	407	Medium.	4.1	31.5	12.79	8.495
Geo. Blake	85	90	85	85	100	445	Medium.	4.2	32	13.04	8.89
Myron L. Briggs	60	45	85	85	100	375	Poor.	4.1	32	12.92	8.82
E. J. Butler	75	65	85	80	95	400	Medium.	3.94	31	13.03	8.63
F. Cantrall	70	60	85	80	100	405	Medium.	5	32	14	9
Henry Coe	80	80	85	75	100	420	Medium.	3.7	32	12.44	8.74
Arthur Curtis	70	70	85	80	100	405	Medium.	4.4	33	13.56	9.10
C. G. Convis	80	85	70	80	95	420	Medium.	4	33	13.05	9.05
Wm. Eddy	78	80	85	75	100	418	Medium.	3.9	32.5	12.80	8.905
Geo. Everett	95	90	85	80	100	450	Good.	4.3	32.5	13.28	8.985
T. D. Fenn	85	85	85	85	100	440	Medium.	3.9	33.5	13.05	9.155
W. S. Fruin	85	85	85	80	100	435	Medium.	4.1	31.5	12.79	8.695
Vail Fuller	70	70	85	80	100	405	Medium.	4.5	33.5	13.77	9.275
Willison Goodenough	80	80	85	75	100	420	Medium.	3.7	31.5	12.31	8.615
Vern Greenman	65	40	85	85	100	395	Poor.	3.9	33.5	13.05	9.155
Geo. Haarer	75	85	85	80	100	425	Medium.	4.2	33.5	13.41	9.215
Archie Henry	70	60	85	80	100	405	Medium.	3.6	32	12.32	8.72
Dorr Hiscock	65	45	85	75	100	370	Poor.				
W. J. Kirkpatrick	70	45	85	75	100	375	Poor.	4.2	33	13.29	9.09
J. Krum	70	65	85	80	85	385	Poor.	4.1	33.5	13.29	9.195
E. Lean	95	100	85	85	100	465	Good.	4	32	12.80	8.80
Fred Legge	90	85	85	100	100	460	Good.	4.2	33.5	13.41	9.215
H. A. Markham	55	55	85	85	100	380	Poor.	4.7	32.5	13.76	9.065
Frank Minzes	83	85	85	75	100	428	Medium.	3.6	32	12.32	8.72
C. E. Minor	75	75	85	80	100	415	Medium.	3.9	31.5	12.55	8.655
W. D. Minor	70	85	85	80	100	420	Medium.	4.1	34	13.42	9.32
J. A. Myers	70	80	85	75	100	410	Medium.				
Geo. Peet	86	80	85	85	100	436	Medium.	4.4	30.5	12.90	8.50
Lee Perrigo	95	95	85	85	100	460	Good.	3.8	34	13.06	9.26
Post Land Company	100	100	95	100	100	495	Excellent.				
Allie J. Potter	75	85	85	80	95	420	Medium.	5.1	33.5	14.49	9.39
Frank Quims	65	85	85	80	100	415	Medium.	3.7	32	12.44	8.74
Chas. Reid	65	40	85	75	100	365	Poor.	4	32	12.80	8.80
John Rolfe	85	85	85	75	100	430	Medium.	3.8	31.5	12.43	8.635
A. W. Russell	85	70	85	80	100	420	Medium.	3.8	32	12.56	8.76
A. W. Russell	80	65	85	80	100	410	Medium.	3.8	30	12.06	8.26
Wm. Seamans	90	75	85	80	95	425	Medium.	3.8	32	12.56	8.76
S. A. Stevens	75	65	85	80	100	405	Medium.	4	31	12.55	8.55
Edward Towler	85	90	85	85	100	445	Medium.	4.5	31	13.15	8.65
A. J. White	60	55	80	80	95	370	Poor.	3.6	31	12.17	8.57
Geo. B. Willard	81	60	85	85	100	411	Medium.	3.8	30	12.06	8.26
J. M. Willison	90	85	85	80	100	340	Poor.	4.4	32	13.28	8.88
Chas. Woodruff	70	76	85	80	95	405	Medium.	4.8	32.5	13.88	9.085



LABORATORY NO. 3.

STATE ANALYST'S REPORT.



LABORATORY NO. 1.

Hon. G. M. Dame, State Dairy and Food Commissioner, Lansing Mich.:

Dear Sir—I have the honor to submit the following report of the work of the laboratory division of the Dairy and Food Department during the fiscal year (July 1, 1911–July 1, 1912).

A total of 3,552 samples were analyzed during this period. Of this number 3,070 included foods, beverages and linseed oils, 200 commercial feeding stuffs and 282 drug preparations. Two thousand ninety of the former were found to comply with the provisions of the statute, while 980 were found to be adulterated or misbranded. Of the 282 drug samples submitted 160 were found to be adulterated or misbranded within the meaning of the drug act.

An examination of the summary will reveal the fact that about one-third of the samples analyzed were milk and ice cream. The greater number of these were examined during the first two months of the fiscal year (July and August). At this time the Department gave increased attention to the milk and ice cream supply of the cities of both the Upper and Lower Peninsulas. The entire inspection force being divided into squads with instructions to note particularly the sanitary conditions under which these two products were produced and to submit samples of each product from every manufacturer and dealer in the principal cities of the state. Consequently a large number of both products were submitted and analyzed. Those taken in the Lower Peninsula were sent to the laboratory at Lansing for analysis while those taken in the Upper Peninsula were analyzed by one of the members of the laboratory staff at the temporary laboratories established at Marquette, in the chemical laboratory of the State Normal School and at Houghton in the chemical laboratory of the Michigan College of Mines. As these two articles, or at least one of them, forms a part of the daily diet of the majority of people especial attention should be given them at all times of the year, but perhaps more so during the summer months when a greater quantity of both are consumed.

The number of special inspections on various products have necessitated the analysis of a large number of samples of each product. Notable among these were soft drinks, candy, linseed oil, and mince meat, the results of which will be found in the appended report.

The drug act, unlike the laws covering other products, fails to provide for the publishing of the analysis of samples with a popular explanation of the same. Therefore, the 282 drug samples which were analyzed during the year only appear in the general summary. It appears that this feature of the drug act is an important one and one that should not have been omitted. In order to attain the end sought and that the drug law may be of the most benefit to the consumer and to those who were responsible for its enactment it would seem that this feature should be changed.

During the latter part of the last fiscal year and the first of the present

year the entire laboratory was remodeled and refinished; the working desks and apparatus being rearranged to facilitate economy in the time and convenience of the workers. Consequently a greater amount of work could be done in a shorter period of time. New and modern apparatus has been added from time to time as occasion demanded it, so that at the present we believe we have one of the best equipped and most modern laboratories for the nature of the work demanded in this section of the country.

For the greater part of the present year the laboratory force has consisted of three analysts beside myself. One analyst has devoted his entire time to the analysis of commercial feeding stuffs and linseed oils. One analyst has been constantly employed analyzing dairy products, etc., and another has devoted the greater part of the time to the analysis of drug preparations. The chief of the laboratory has looked after the examination of food stuffs and the checking up of analyses of samples on which prosecutions were to be brought. It has been the policy of the laboratory division of the Department to have each analyst, in addition to the regular work, carry on some research work along their respective lines. Each worker has derived considerable benefit from this kind of work beside a great deal of general information has been gained. It was while engaged in this kind of work that it was discovered that formic acid was being used as a preservative in some fruit products. Other experimental and research work has been completed during the past year by various members of the laboratory staff. Some of the subjects which have received attention are: An experiment to determine the variability of butter fat in ice cream, an experiment to determine the reliability of the modified Babcock test for the butter fat content of ice cream, an experiment to determine the keeping qualities of spirits nitrous ether and experimental work on the color value of vanilla extracts, beside considerable co-operative work with chemists of other states, having to do with the perfection of methods.

The act that established the Dairy and Food Department was passed by the Legislature in 1893 and has been amended from time to time. It now provides, among other things, for the appointment of a State Analyst, and an Assistant Analyst. In the past few years there has been no material change in this feature of the law. However an examination of the State Analyst report for the past ten years will show that there has been a material change in the amount of work carried on in the Department laboratory.

At present there is no provision in the law for the employment of more than one assistant chemist and one drug chemist, whose salaries are provided for. The steady increase in the amount of work, however, for the past few years has necessitated the employment of other assistants besides those named. These assistant chemists can only be paid out of the general appropriation and consequently their salaries are not adequate. I therefore believe it urgent and would recommend that this feature of the Dairy and Food laws be changed. I believe it advisable that some provision be made for the employment of assistant chemists under their proper title and that a maximum salary be fixed for persons so employed, in order that we may start a worker on a small salary and as he becomes more and more proficient reward him from time to time, thereby furnishing some inducement for him to devote his utmost

energies for the benefit of the state. We lost one of our force during the year, Mr. Palen, the former Drug Analyst, who tendered his resignation during the early part of the year to accept a more lucrative position with a manufacturing concern.

I wish to take opportunity to thank my associates for their earnest and painstaking efforts to keep the Michigan Dairy and Food Department up to the high standard it has attained and assuring you of our continued interest in all things relating to this Department and our earnest desire to do all in our power toward the enforcement of the laws coming under your jurisdiction as Dairy and Food Commissioner. I beg to remain,

Yours very truly,

F. L. SHANNON,
State Analyst.

STATE OF MICHIGAN.

SUMMARY.

Article.	Total.	Not found adulterated or misbranded.	Found adulterated or misbranded.
Bacon.....	1	0	1
Baking powder.....	3	3	0
Barley.....	1	1	0
Biscuit.....	1	1	0
Buckwheat flour.....	13	9	4
Butter.....	24	12	12
Candy.....	293	292	1
Canned goods.....	11	8	3
Catsup.....	11	11	0
Cereals.....	3	1	2
Cherries (Maraschino).....	3	1	2
Chicory.....	5	2	3
Chocolate.....	2	2	0
Coffee.....	6	4	2
Coffee comp.....	10	0	10
Compounds (Misc.).....	4	3	1
Corn meal.....	1	1	0
Cream.....	8	8	0
Cream tartar.....	1	1	0
Evaporated milk.....	3	3	0
Flavoring preparations.....	62	44	18
Flour.....	5	4	1
Fruit butter, pie fillers, etc.....	7	6	1
Fruit juices.....	2	2	0
Honey.....	4	4	0
Horse radish.....	3	2	1
Ice cream.....	365	261	104
Ice cream cones.....	2	2	0
Jellies, preserves.....	3	1	2
Lard and lard compounds.....	12	8	4
Linseed oils.....	56	36	20
Maple sugar.....	9	5	4
Maple syrup.....	6	3	3
Meats.....	97	35	62
Milk.....	985	833	152
Mince meat.....	39	26	13
Miscellaneous.....	39	35	4
Mushrooms.....	1	1	0
Mustard preparations.....	14	7	7
Oils.....	17	9	8
Oleomargarine.....	6	2	4
Oysters.....	3	0	3
Pancake flour.....	2	1	1
Pepper.....	8	5	3
Powdered sugar.....	1	1	0
Preservatives.....	26	7	19
Soft drinks.....	731	284	447
Spices.....	3	3	0
Sugar.....	1	0	1
Sugar butter.....	2	0	2
Sweetening powder.....	1	0	1
Syrups.....	83	63	20
Table dressing.....	1	1	0
Turpentine.....	2	0	2
Vinegar.....	67	35	32
Water.....	1	1	0
Totals.....	3,070	2,090	980

SUMMARY OF DRUGS ANALYZED.

Article.	Total.	Not found adulterated or misbranded.	Found adulterated or misbranded.
Alcohol	1	0	1
Almond cream	1	0	1
Bay rum	1	1	0
Carbolic acid	1	0	1
Castor oil	1	1	0
Concentrated nitrous ether	1	1	0
Essence peppermint	22	15	7
Essence papain	2	0	2
Essence wintergreen	2	1	1
Fluid ext. cascara aromatic	1	1	0
Fowlers solution	8	4	4
Lime water tablets, comp	1	1	0
Lime water	6	2	4
Liquid pearl	1	1	0
Marsh root	1	0	1
Nux vomica, powdered	1	1	0
Olive oil	1	1	0
Peroxide cream	1	1	0
Peroxide of hydrogen	2	0	2
Proprietary preparations	56	26	30
Spirits camphor	25	14	11
Spirits nitre	66	16	50
Spirits turpentine	8	5	3
Tr. aconite	1	1	0
Tr. arnica	6	5	1
Tr. ginger	2	1	1
Tr. iodine	28	7	21
Tr. iron	3	1	2
Tr. opium	31	15	16
Vanilla flavor	1	0	1
Totals	282	122	160

ANALYSES OF SAMPLES.

BACON.

No. 23720, I-1520. Sample of Bacon procured from A. L. Chilson, Battle Creek. Artificially colored with a coal tar dye.

BUCKWHEAT FLOUR.

No. 23286, S-433. Sample of Buckwheat Flour manufactured by the Owosso Milling Co., Owosso. Not a pure buckwheat flour.

No. 23292, S-434. Sample of Buckwheat Flour manufactured by the Owosso Milling Co., Owosso. Not a pure buckwheat flour.

No. 23500, S-462. Sample of Buckwheat Flour manufactured by the Owosso Milling Co., Owosso. Not a pure buckwheat flour.

No. 23717, S-503. Sample of Buckwheat Flour manufactured by the Owosso Milling Co., Owosso. Not a pure buckwheat flour.

BUTTER.

No. 20857, A-11. Sample of "Butter" purchased from Delehanty & Curtis, 117 Adams Ave., East Detroit. Sample is oleomargarine.

No. 21060. Unofficial. Sample of Butter. Product is Renovated Butter.

No. 23391, I-1462. Sample of "Butter" taken from the table of Julia Caldwell's restaurant, Ypsilanti. Product is oleomargarine.

No. 23452, S-459. Sample of "Butter" taken from table of Mrs. D. Vantine's restaurant, Montrose. Product is oleomargarine.

No. 23658, K-139. Sample of butter handled by Lafer Bros., Detroit, and procured from Joseph Kudla, 1143 Chene St., Detroit. Sample is not pure butter.

No. 23756, A-87. Sample of "Butter" purchased of the Detroit Tea & Butter Co., No. 5 Central Market, Detroit. Product is process butter.

No. 23769, G-576. Sample of "Butter" purchased from John Catsapis, Sault Ste. Marie. Sample is oleomargarine.

No. 23838, I-1549. Sample of "Butter" taken from table in hotel dining room of Stanley A. Thomas, Ann Arbor. Product is oleomargarine. No sign posted.

No. 23899. Y-93. Sample of "Butter" procured from Hotel Ruhl, Jackson. Product is oleomargarine. No sign posted.

No. 24121, S-550. Sample of "Butter" taken from dining room of Hotel Walton, Olivet. Sample is oleomargarine. No oleomargarine sign displayed in dining room.

No. 24131, G-586. Sample of "Butter" procured from Wm. Wollner, Laurium. Product is a mixture of butter and oleomargarine.

No. 24478, G-610. Sample of "Butter" procured from Jos. Baur (Walker Hotel), Ironwood. Product is oleomargarine.

CANDY.

No. 19339, A-5. Sample of Grab Bag Candy purchased from Valentine Schroeder, 38 Woodward Ave., Detroit. Candy is unwholesome for human consumption.

CANNED GOODS.

No. 20819, G-173. Sample of Mixed French Vegetables procured from E. R. Hixon, Houghton. Contains copper sulphate, an injurious color.

CEREALS.

No. 23262, I-1455. Sample of "You Like" brand Coffee, Cereal and Chicory manufactured by the Eureka Coffee Co., Buffalo, N. Y., and procured from Wm. Austin, Kalamazoo. Misbranded.

No. 23356, V-278. Sample of "Zesto" manufactured by the Zesto Cereal Company, Palo, Mich. Misbranded.

CHERRIES (MARASCHINO.)

No. 20811, U-177. Sample of Maraschino Cherries handled by C. Elliott & Co., Detroit. Manufacturer's name and address not on label. Not properly labeled.

No. 23321, U-261. Sample of Maraschino Cherries handled by Taylor, McLeisch & Co., Detroit. Label does not state name and address of manufacturers. Misbranded.

CHICORY.

No. 21020, I-1278. Sample of Coffee & Chicory handled by Kidd, Dater Co., Benton Harbor. Label does not bear the words "Coffee Compound." Not properly labeled.

No. 21186. Unofficial. Sample of Chicory (ground). Manufacturer's name and address not on label. Not properly labeled.

No. 21187. Unofficial. Sample of Chicory (ground). Manufacturer's name and address not on label. Not properly labeled.

COFFEE.

No. 24034, S-548. Sample of "Coffee" handled by Imperial Tea Co., Detroit, and found with Paul Leo, Saginaw. A mixture of coffee, chicory and cereal. Package had no label of any description, nor the manufacturer's name and address.

No. 24096, I-1575. Sample of No. 5 Compound manufactured by the F. Widlar Co., Cleveland, Ohio, and procured from Davis & Metz, Albion. Sample is coffee compound, misbranded.

COFFEE COMPOUND.

No. 23070, I-1438. Sample of Ever Ready brand of a Compound of Coffee, Cereal and Chicory put up by John A. Tolman & Co., Chicago, and handled by Fred Armstrong, Benton Harbor. Sample is misbranded.

No. 23072, I-1441. Sample of Cafe Special put up by Reid, Murdock & Co., Chicago, Ill. Package is misbranded.

No. 23137, G-463. Sample of Combination Cereal, Coffee and Chicory put up by W. F. McLaughlin & Co., Chicago, Ill. Package is misbranded.

No. 23207, G-468. Sample of Coffee, Rye, Peas and Chicory put out by Reid, Murdock & Co., Chicago. Package is misbranded.

No. 23667, I-1517. Sample of You-Try-It substitute for coffee manufactured by Dwinell-Wright & Co., Boston, Mass., handled by Godsmark, Durand Co., Battle Creek, and procured from W. J. Hensen, Battle Creek. Misbranded.

No. 23706, S-496. Sample of Grandmother's Blend Coffee Compound manufactured by Atlantic & Pacific Tea Co., Jersey City, New Jersey, and procured from the Atlantic & Pacific Tea Co., Flint. Misbranded.

No. 23707, S-497. Sample of "Granulated 8 o'clock Breakfast Compound" manufactured by Atlantic & Pacific Tea Co., Jersey City, New Jersey, and procured from the Atlantic & Pacific Tea Co., Flint. Misbranded.

No. 23709, S-499. Sample of Gehlert's Famous Coffee Compound manufactured by the Gehlert Coffee Co., Detroit, procured from H. A. Johnson, Durand. Misbranded.

No. 23754, S-520. Sample of "Kaffee Klatch" manufactured by the Crescent Tea Co., address not given, and found with the H. & P. Supply Co., West Saginaw. Misbranded.

No. 23755, S-521. Sample of Coffee Compound manufactured by the Crescent Tea Co., address not given, and procured from the H. & P. Supply Co., West Saginaw. Not properly labeled.

No. 24034, S-548. Sample of "Coffee" sold by the Imperial Tea Co., Detroit, and procured from Paul Leo, Saginaw. Product is a mixture of coffee, chickory and cereal. Package had no label of any description. Misbranded.

COMPOUND (BUCKWHEAT FLOUR).

No. 23073, I-1442. Sample of Compound Buckwheat and Wheat Flour put out by McNeil & Higgins Co., Chicago. Package is misbranded.

FLAVORING PREPARATIONS.

No. 19318, E-99. Sample of Vanilla Flavor handled by Geo. C. Dennis, Rochester. Not properly labeled.

No. 19889, G-42. Sample of "Banana Synthetic" manufactured by E. A. Lange, West DePere, Wis. Not properly labeled as a mixture or compound.

No. 20098, Unofficial. Sample of Vanilla Extract. Contains artificial color. Not salable.

No. 20768, I-1260. Sample of Tropical Flavoring Vanilla and Vanillin manufactured by the Arctic Manufacturing Co., Grand Rapids. Not properly labeled.

No. 21019, I-1277. Sample of Vanilline & Coumarine Flavor manufactured by W. M. Hoyt Co., Chicago. Not properly labeled.

No. 21113, V-134. Sample of Peppermint Extract manufactured by Druke, Lynch Co., Grand Rapids. Below standard.

No. 21154, P-243. Sample of Vanilla (Liquid) manufactured by William Haigh Co., Baltimore, Md. Below standard for a vanilla extract.

No. 21155, P-244. Sample of Vanilla (Liquid) manufactured by Franklin MacVeigh Co., Chicago. Not properly labeled as a mixture or compound.

No. 23068, I-1436. Sample of Lemon Extract manufactured by L. Perrigo Co., Allegan. Not a standard lemon extract and therefore not properly labeled.

No. 23122, I-1443. Sample of Lemon Extract manufactured by Laird Supply Co., Bangor. Not a standard lemon extract and therefore not properly labeled. No manufacturer's name and address on the label.

No. 23124, I-1445. Sample of "Pure Extract of Lemon" manufactured by Laird Supply Co., Bangor, Mich. Not a standard lemon extract and therefore not properly labeled.

No. 23206, G-467. Sample of Vanilla Extract, manufactured by the Day-Bergwall Co., Milwaukee, Wis., and found with T. E. Bawden, Laurium. Below standard.

No. 23250, Unofficial. Sample of Vanilla Extract. Below standard.

No. 23254, Unofficial. Samples of Extract Peppermint. Below standard.

No. 23313, I-1457. Sample of Red F Flavor Messina Lemon manufactured by the Union Extract Co., Kalamazoo. Below standard in oil content.

No. 23315, I-1459. Sample of Dr. Clark's Red F. Flavor Lemon manu-

factured by the Union Extract Co., Kalamazoo. Below standard in oil content.

No. 23593, G-510. Sample of Vanilla Extract (Special) manufactured by the Day-Bergwall Co., Milwaukee, Wis. Not a pure vanilla extract.

No. 23702, S-476. Sample of "Vanillo" manufactured by T. H. Johnson, Detroit, handled by Central Grocery Co., Detroit, as jobbers, and found with the Flint Tea Co., Flint. Not properly labeled.

FLOUR.

No. 23680, U-303. Sample of Whole Wheat Flour put up by the Commercial Milling Co., Detroit. Weight not marked on sack. Misbranded.

HORSE RADISH PREPARATION.

No. 23752, I-1526. Sample of Horse Radish Cream manufactured by the Battle Creek Horse Radish Co., Battle Creek, and procured from H. S. Fuller, 370 W. Main St., Battle Creek. Misbranded.

ICE CREAM.

No. 19411, S-115. Sample of ice cream manufactured by Alfred Neale & Co., Flint. Sample tested 10.5% butter fat. Below standard.

No. 19491, G-36. Sample of ice cream manufactured by D. Booth, Sault Ste. Marie. Sample tested 7.0% butter fat. Below standard.

No. 19493, G-38. Sample of ice cream manufactured by D. Booth, Sault Ste. Marie. Sample tested 6.5% butter fat. Below standard.

No. 19494, G-40. Sample of ice cream manufactured by N. Montsatson, Sault Ste. Marie. Sample tested 9.0% butter fat. Below standard.

No. 19495, G-39. Sample of ice cream manufactured by A. M. Combs, Sault Ste. Marie. Sample tested 11.0% butter fat. Below standard.

No. 19551, S-128. Sample of ice cream manufactured by Wm. Paulos, Saginaw. Sample tested 11.0% butter fat. Below standard.

No. 19584, V-55. Sample of ice cream manufactured by West Michigan Ice Cream Company, Grand Rapids. Sample tested 10.4% butter fat. Below standard.

No. 19587, I-1006. Sample of ice cream manufactured by B. T. Pierce, Grand Rapids. Sample tested 11.7% butter fat. Below standard.

No. 19588, I-1007. Sample of ice cream manufactured by Wests Drug Store, Grand Rapids. Sample tested 11.3% butter fat. Below standard.

No. 19591, I-1010. Sample of ice cream manufactured by Kelly Ice Cream Co., Grand Rapids. Sample tested 11.4% butter fat. Below standard.

No. 19594, I-1013. Sample of ice cream manufactured by Piper Ice Cream Co., Grand Rapids. Sample tested 10.5% butter fat. Below standard.

No. 19595, I-1014. Sample of ice cream manufactured by West Side Ice Cream Co., Grand Rapids. Sample tested 9.9% butter fat. Below standard.

No. 19612, Y-14. Sample of ice cream manufactured by W. A. Weihe, Macatawa Park. Sample tested 9.8% butter fat. Below standard.

No. 19666, S-145. Sample of ice cream manufactured by Jerome B.

Stevens & Son, Bay City. Sample tested 11.1% butter fat. Below standard.

No. 19667, S-146. Sample of ice cream manufactured by Robert Paris and L. C. Witt, Bay City. Sample tested 10.0% butter fat. Below standard.

No. 19668, S-147. Sample of ice cream manufactured by Frank J. Ackerman, Bay City. Sample tested 11.7% butter fat. Below standard.

No. 19671, S-150. Sample of ice cream manufactured by Wm. Charouhis, Bay City. Sample tested 11.0% butter fat. Below standard.

No. 19689, Z-134. Sample of ice cream manufactured by The Rowima Co., Ypsilanti. Sample tested 11.5% butter fat. Below standard.

No. 19751, I-1059. Sample of ice cream manufactured by George Klemos, Battle Creek. Sample tested 11.3% butter fat. Below standard.

No. 19763, U-61. Sample of ice cream manufactured by Floyd Lehner, Pontiac. Sample tested 9.2% butter fat. Below standard.

No. 19776, A-9. Sample of ice cream manufactured by J. H. Gatz, Mt. Clemens. Sample tested 11.0% butter fat. Below standard.

No. 19778, K-39. Sample of ice cream manufactured by C. B. Kuhn, Detroit. Sample tested 10.8% butter fat. Below standard.

No. 19781, K-42. Sample of ice cream manufactured by Central Drug Co., Detroit. Sample tested 11.4% butter fat. Below standard.

No. 19797, U-34. Sample of ice cream manufactured by Detroit Creamery Co., Detroit. Sample tested 11.7% butter fat. Below standard.

No. 19800, U-37. Sample of ice cream manufactured by Standard Ice Cream Co., Detroit. Sample tested 11.6% butter fat. Below standard.

No. 19807, U-44. Sample of ice cream manufactured by the Detroit Creamery Co., Detroit. Sample tested 11.4% butter fat. Below standard.

No. 19810, U-47. Sample of ice cream manufactured by Anthony Colego, Detroit. Sample tested 7.8% butter fat. Below standard.

No. 19811, U-48. Sample of ice cream manufactured by Gincoppe Cotaldo, Detroit. Sample tested 6.9% butter fat. Below standard.

No. 19813, U-50. Sample of ice cream manufactured by Rosilino Graziano, Detroit. Sample tested 10.2% butter fat. Below standard.

No. 19816, K-44. Sample of ice cream manufactured by G. B. Ferguson, Detroit. Sample tested 10.8% butter fat. Below standard.

No. 19819, K-46. Sample of ice cream manufactured by Detroit Creamery Co., Detroit. Sample tested 10.5% butter fat. Below standard.

No. 19820, K-47. Sample of ice cream manufactured by Melonakos & Lacakis, Monroe. Sample tested 10.9% butter fat. Below standard.

No. 19821, K-48. Sample of ice cream manufactured by The Velvet Ice Cream Co., Adrian. Sample tested 9.6% butter fat. Below standard.

No. 19880, I-1079. Sample of ice cream manufactured by C. W. Vanderbilt, Kalamazoo. Sample tested 11.2% butter fat. Below standard.

No. 19886, I-1085. Sample of ice cream manufactured by the Arctic Ice

Cream Co., Kalamazoo. Sample tested 10.9% butter fat. Below standard.

No. 19937, K-49. Sample of ice cream manufactured by the Velvet Ice Cream Co., Adrian. Sample tested 10.5% butter fat. Below standard.

No. 19938, K-50. Sample of ice cream manufactured by Val F. Fox, Adrian. Sample tested 10.4% butter fat. Below standard.

No. 19939, K-51. Sample of ice cream manufactured by Pospan & Kokkales, Adrian. Sample tested 7.9% butter fat. Below standard.

No. 19981, I-1113. Sample of ice cream manufactured by Dalton Creamery, Muskegon. Sample tested 8.7% butter fat. Below standard.

No. 19999, P-137. Sample of ice cream manufactured by Dalton Creamery Co., Muskegon. Sample tested 9.5% butter fat. Below standard.

No. 20047, K-53. Sample of ice cream manufactured by F. M. Colwell, Jackson. Sample tested 8.7% butter fat.

No. 20051, K-57. Sample of ice cream manufactured by the Fassett Ice Cream Co., Jackson. Sample tested 11.2% butter fat. Below standard.

No. 20074, P-160. Sample of ice cream sold by Fischer Candy Shop, Holland. Sample tested 10.5% butter fat. Below standard.

No. 20077, I-1123. Sample of ice cream manufactured by J. Van-Wessams, Grand Haven. Sample tested 9.9% butter fat. Below standard.

No. 20090, W-6. Sample of ice cream manufactured by N. H. Winans & Sons, Lansing. Sample tested 9.6% butter fat. Below standard.

No. 20101, G-48. Sample of ice cream manufactured by August Burrall, Calumet. Sample tested 11.6% butter fat. Below standard.

No. 20128, U-116. Sample of ice cream sold by Stephen Bramsby, Ann Arbor. Sample tested 11.3% butter fat. Below standard.

No. 20156, U-129. Sample of ice cream sold by Peter Mellos, Mt. Clemens. Sample tested 8.2% butter fat. Below standard.

No. 20225, U-154. Sample of ice cream sold by A. D. Neale & Co., Flint. Sample tested 11.2% butter fat. Below standard.

No. 20340, P-170. Sample of ice cream manufactured by Rouse Ice Cream Co., Benton Harbor. Sample tested 11.0% butter fat. Below standard.

No. 20341, P-171. Sample of ice cream manufactured by Rouse Ice Cream Co., Benton Harbor. Sample tested 10.0% butter fat. Below standard.

No. 20342, P-172. Sample of ice cream manufactured by H. O. Wilson, St. Joseph. Sample tested 8.0% butter fat. Below standard.

No. 20343, P-173. Sample of ice cream manufactured by H. O. Wilson, St. Joseph. Sample tested 6.8% butter fat. Below standard.

No. 20351, P-174. Sample of ice cream manufactured by F. F. Smith & Sons, Watervliet. Sample tested 7.6% butter fat. Below standard.

No. 20352, P-176. Sample of ice cream manufactured by H. O. Wilson, St. Joseph. Sample tested 5.0% butter fat. Below standard.

No. 20354, P-177. Sample of ice cream manufactured by H. O. Wilson, St. Joseph. Sample tested 7.2% butter fat. Below standard.

No. 20355, P-178. Sample of ice cream manufactured by H. O. Wilson, St. Joseph. Sample tested 5.8% butter fat. Below standard.

No. 20356, P-179. Sample of ice cream manufactured by E. E. Rouse, Benton Harbor. Sample tested 11.10% butter fat. Below standard.

No. 20369, G-143. Sample of ice cream manufactured by D. Booth, Sault Ste. Marie. Sample tested 9.8% butter fat. Below standard.

No. 20372, G-146. Sample of ice cream manufactured by Joseph Maltas, Sault Ste. Marie. Sample tested 9.6% butter fat. Below standard.

No. 20378, G-152. Sample of ice cream manufactured by N. Montsatson, Sault Ste. Marie. Sample tested 10.1% butter fat. Below standard.

No. 20379, G-153. Sample of ice cream manufactured by A. M. Comb, Sault Ste. Marie. Sample tested 9.2% butter fat. Below standard.

No. 20380, G-154. Sample of ice cream manufactured by D. Booth, Sault Ste. Marie. Sample tested 9.9% butter fat. Below standard.

No. 20398, V-81. Sample of ice cream manufactured by Dalton Creamery Co., Muskegon. Sample tested 9.4% butter fat. Below standard.

No. 20399, V-82. Sample of ice cream manufactured by Dalton Creamery Co., Muskegon. Sample tested 9.6% butter fat. Below standard.

No. 20424, P-189. Sample of ice cream manufactured by Piper Ice Cream Co., Kalamazoo. Sample tested 11.1% butter fat. Below standard.

No. 20427, P-192. Sample of ice cream sold by John Venson, South Haven. Sample tested 7.2% butter fat. Below standard.

No. 20558. Unofficial. Sample of ice cream. Sample tested 5.9% butter fat. Below standard.

No. 20564, P-200. Sample of ice cream manufactured by P. A. Hults & Son, Charlotte. Sample tested 9.3% butter fat. Below standard.

No. 20565, P-201. Sample of ice cream manufactured by Geo. Akas, Charlotte. Sample tested 9.6% butter fat. Below standard.

No. 20567, W-7. Sample of ice cream manufactured by Edward Killian, Lansing. Sample tested 9.6% butter fat. Below standard.

No. 20635, P-217. Sample of ice cream manufactured by I. W. Carrel, Berrien Springs. Sample tested 8.1% butter fat. Below standard.

No. 20677, V-84. Sample of ice cream manufactured by the West Michigan Ice Cream Co., Grand Rapids. Sample tested 5.5% butter fat. Below standard.

No. 20678, V-83. Sample of ice cream manufactured by the West Michigan Ice Cream Co., Grand Rapids. Sample tested 7.0% butter fat. Below standard.

No. 20759, P-220. Sample of ice cream manufactured by J. L. Turner, South Bend, Ind., handled by Hopkins & Hocking, Cassopolis. Sample tested 10.3% butter fat. Below standard.

No. 20798, P-221. Sample of ice cream manufactured by A. Traverse, Constantine. Sample tested 10.1% butter fat. Below standard.

No. 20820, P-224. Sample of ice cream manufactured by S. Brody, Marcellus. Sample tested 10.1% butter fat. Below standard.

No. 20821, P-225. Sample of ice cream manufactured by J. L. Turner, South Bend, Ind., handled by Claude R. Miller, Marcellus. Sample tested 10.8% butter fat. Below standard.

No. 20822, P-226. Sample of ice cream manufactured by Fritz Therkow, Marcellus. Sample tested 8.7% butter fat. Below standard.

No. 20901, V-88. Sample of ice cream manufactured by Dalton

Creamery Co., Muskegon. Sample tested 11.5% butter fat. Below standard.

No. 21557, P-254. Sample of ice cream manufactured by W. W. Murray, LaGrange, Ind. Dealer, Peter Ferro, Sturgis. Sample tested 7.5% butter fat. Below standard.

• No. 23682, Z-368. Sample of ice cream manufactured by Nicholas Cotsonis, Hillsdale. Butter fat 9%. Below standard.

No. 24002, Z-370. Sample of ice cream manufactured by the Velvet Ice Cream Co., Adrian, and procured from Fadell Bros., Milan. Butter fat 9.1%. Below standard in butter fat.

No. 24235, G-593. Sample of ice cream manufactured by Best Bros., Iron Mountain, and procured from Mrs. W. H. Tregilgas, Iron Mountain. Butter fat 11.0%. Below standard.

No. 24302, Z-371. Sample of ice cream manufactured by the Velvet Ice Cream Co., Adrian, and procured from A. A. Vedder, Whittaker. Butter fat 7.7%. Below standard.

No. 24308, Z-374. Sample of ice cream manufactured by the Velvet Ice Cream Co., Adrian, and procured from Fadell Bros., Milan. Butter fat 11.3%. Below standard.

No. 24309, Z-375. Sample of ice cream manufactured by Ellis Jacob, Dundee. Butter fat 4.8%. Below standard.

No. 24310, Z-376. Sample of ice cream manufactured and sold by Ellis Jacob, Dundee. Butter fat 4.7%. Below standard.

No. 24359, Z-378. Sample of ice cream manufactured and sold by Melonakis & Lacakos, Monroe. Butter fat 10.0%. Below standard.

No. 24360, Z-379. Sample of ice cream manufactured by the Velvet Ice Cream Co., Adrian, and procured from Fadell & Joseph, Monroe. Butter fat 11.0%. Below standard.

No. 24362, Z-381. Sample of ice cream manufactured by Hall Creamery, Toledo, Ohio, and procured from Abbie Knoble, Petersburg. Butter fat 9.8%. Below standard.

No. 24364, Z-383. Sample of ice cream manufactured by the Ohio Dairy Co., Toledo, Ohio, and procured from Mrs. Robert McCarty, Deerfield. Butter fat 7.5%. Below standard.

No. 24366, Z-385. Sample of ice cream manufactured by the Ohio Dairy Co., Toledo, Ohio, and procured from Mrs. H. Krefer, Deerfield. Butter fat 7.7%. Below standard.

No. 24370, Z-389. Sample of ice cream manufactured by Hall Creamery, Toledo, Ohio, and procured from S. A. Johnson, Blissfield. Butter fat 8.5%. Below standard.

No. 24372, Z-391. Sample of ice cream manufactured by the Ohio Dairy Co., Toledo, Ohio, and procured from H. H. Spencer, Morenci. Butter fat 3.8%. Below standard.

No. 24377, Z-396. Sample of ice cream manufactured and sold by B. J. Pulver, Tecumseh. Butter fat 11.2%. Below standard.

No. 24378, Z-397. Sample of ice cream manufactured and sold by H. K. Hay, Tecumseh. Butter fat 11.3%. Below standard.

No. 24379, Z-398. Sample of ice cream manufactured and sold by Hagans Drug Co., Monroe. Butter fat 10.0%. Below standard.

No. 24380, Z-399. Sample of ice cream manufactured and sold by Ellis Jacobs, Dundee. Butter fat 5.8%. Below standard.

No. 24510, W-38. Sample of ice cream manufactured by the Cottage Ice Cream Co., Lansing. Butter fat 10.2%. Below standard.

No. 24525, W-46. Sample of ice cream manufactured by C. A. Connor, Owosso. Butter fat 9.2%. Below standard.

No. 24564, G-618. Sample of ice cream manufactured by Bridgman-Russell, Hancock, and procured from J. E. McAllister, Hancock. Butter fat 11.0%. Below standard.

No. 24579, P-405. Sample of ice cream manufactured and sold by F. F. Smith & Son, Watervliet. Butter fat 9.6%. Below standard.

No. 24611, Z-377. Sample of ice cream manufactured and sold by Christ Brown, Dundee. Butter fat 11.3%. Below standard.

JELLY.

No. 23953, G-576. Sample of Columbia Brand Preserves manufactured by the St. Louis Syrup & Preserving Co., St. Louis, Mo., handled by Edgar & Son, Marquette, as jobbers, and found with Jacob Smith, Marquette. Misbranded.

LARD.

No. 20035, G-44. Sample of "Lard" sold by Isaac Nitti, Wolverine. Product is lard compound. No statement on package to indicate same.

No. 20815, I-1270. Sample of Lard handled by F. R. Merrill & Co., Chicago, Ill. Sold by Ender & Geisler, Watervliet. Sample is lard compound not properly labeled.

No. 23910, S-537. Sample of Lard procured from A. F. Thompson, Flint. Sample is not pure lard.

LARD COMPOUND.

No. 23045, I-1439. Sample of "Snow Drift" sold by McNeil & Higgins Co., Chicago. Not properly labeled as a lard compound.

LINSEED OIL.

No. 19406. Unofficial. Sample of Boiled Linseed Oil. Contains about 20% of a petroleum product.

No. 20583. Unofficial. Sample of Linseed Oil. Not a pure linseed oil.

No. 20808. Unofficial. Sample of Linseed Oil. Adulterated with some foreign oil.

No. 23715, V-299. Sample of Boiled Linseed Oil manufactured by the Southern States Turpentine Co., Cleveland, Ohio, and procured from H. M. Johnson & Co., 1265 S. Division St., Grand Rapids. Not a pure boiled linseed oil. Contains a petroleum product.

No. 23802, S-526. Sample of Boiled Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio. Not a pure linseed oil, contains a mineral oil.

No. 23803, S-527. Sample of Raw Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio. Not a pure linseed oil, contains a mineral oil.

No. 23804, S-528. Sample of Raw Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio. Not a pure linseed oil, contains a mineral oil.

No. 23934, Unofficial. Sample of Linseed Oil. Not a pure linseed oil. Sample is adulterated with a petroleum product.

No. 23943, X-335. Sample of Raw Linseed Oil manufactured by the Garfield Paint Co., Cleveland, Ohio, and procured from Dr. W. W. Thorburn, Lansing. Sample contains 35 to 40% of a petroleum product.

No. 23392, I-1463. Sample of American Brand Linseed Oil manufactured by the American Linseed Oil Co., Cleveland, Ohio, and procured from Thompson Bros., Scotts. Does not comply with the standard for linseed oil.

No. 24006, S-547. Sample of Raw Linseed Oil manufactured by the Southern States Turpentine Co., Cleveland, Ohio, handled by the Fletcher Hardware Co., Detroit, as jobbers. Sample is adulterated. Contains 5-6% of a petroleum product.

No. 24128, S-551. Sample of Raw Linseed Oil manufactured by the American Linseed Oil Co., Cleveland, Ohio, and procured from the store of J. H. Sours, Olivet. Does not comply with standard for linseed oil.

No. 24230, S-558. Sample of Boiled Linseed Oil manufactured by National Linseed Co., Cleveland, Ohio, and procured from the store of J. L. Sibley & Co., Pontiac. Sample is adulterated. Contains about 6-7% of a petroleum product.

No. 24331, S-559. Sample of Boiled Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio, and procured from J. L. Sibley Co., Pontiac. Sample is adulterated. Contains about 5-8% of a petroleum product.

No. 24232, S-560. Sample of Raw Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio, and procured from J. L. Sibley Co., Pontiac. Sample is adulterated. Contains about 12-15% of a petroleum product.

No. 24233, S-561. Sample of Raw Linseed Oil manufactured by the National Linseed Co., Cleveland, Ohio, and procured from the J. L. Sibley Co., Pontiac. Sample is adulterated. Contains about 17-18% of a petroleum product.

No. 24270, U-306. Sample of Raw Linseed Oil manufactured by the Southern States Turpentine Co., Cleveland, Ohio, and procured from the Fletcher Hardware Co., Detroit. Not a pure linseed oil. Contains about 15-17% of a petroleum product.

No. 24277, S-562. Sample of Boiled Linseed Oil manufactured by the Globe Refining Co., Cleveland, Ohio, and procured from W. Winter, Orion. Not a pure linseed oil. Contains about 40% of a petroleum product.

No. 24306, S-563. Sample of Raw Linseed Oil manufactured by the Globe Refining Co., Cleveland, Ohio, and procured from J. H. Olin, Okemos. Sample contains about 40% of a petroleum product.

No. 24405, Unofficial. Sample of Linseed Oil. Not a pure linseed oil.

MAPLE SUGAR.

No. 19310, I-971. Sample of "Maple Sugar" sold by Frank Standish, 514 No. Jackson St., Jackson. Not pure maple sugar. Contains a large percentage of cane sugar.

No. 23994, V-308. Sample of Purity Ohio Sugar, procured from the

Grandville Mercantile Co., Grandville, as pure maple sugar. Sample contains very little maple sugar if any.

No. 23917, S-539. Sample of Maple Sugar manufactured by Michigan Candy & Specialty Co., Saginaw, handled by Schwartz Bros., Flint, as jobbers, and found with Hamady Bros., Flint. Sample is not pure maple sugar.

No. 24236, I-1577. Sample of Maple Sugar procured from the store of George Stiles, Jackson, as maple sugar. Sample is not pure maple sugar.

MAPLE SYRUP.

No. 20192. Unofficial. Sample of "Pure Maple Syrup." Not pure maple syrup.

No. 23777, S-524. Sample of Pioneer Maple Syrup handled by Symons Bros. & Co., Saginaw, and procured from Fred J. Kreutzfeldt, West Saginaw. Not a pure maple syrup.

No. 23993, V-307. Sample of Purity Ohio Syrup procured from Grandville Mercantile Co., Grandville, for pure maple syrup. Sample contains very little maple if any.

MEAT.

No. 20670, K-78. Sample of Pork Sausage (in casing) handled by Bruno Marshall, 257 Russell St., Detroit. No statement on label to indicate the presence of cereal.

No. 21200, I-1283. Sample of Sausage from F. C. Schmidt, 212 Main St., Niles. Sample contains sulphites, a preservative held to be injurious to health.

No. 20774, K-82. Sample of Hamburg Steak manufactured by Thos. Barlum & Sons, Detroit. Sample contains sulphites, a preservative injurious to health.

No. 21083, V-131. Sample of Hamburg Steak manufactured by L. J. Katz, Grand Rapids. Sample contains sulphites, a preservative injurious to health.

No. 21152, V-138. Sample of Hamburg Steak manufactured by J. M. Vanderwal, Grand Rapids. Sample contains sulphites, a preservative injurious to health.

No. 22028, I-1430. Sample of Hamburg Steak manufactured by Fred J. Luckner, St. Joseph. Sample contains sulphites, a preservative injurious to health.

No. 23031, S-395. Sample of Frankfurts manufactured by Schwinck Bros., Saginaw. No statement on package to indicate presence of cereal.

No. 23032, S-396. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and found with Robert F. Edelhoff, Saginaw. No statement on package to indicate the presence of cereal.

No. 23039, S-409. Sample of Frankfurts purchased from Knuttel & Bruner, Saginaw. No statement on package to indicate the presence of cereal.

No. 23041, S-411. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and found with H. W. Hurst, Saginaw. No statement on package to indicate the presence of cereal.

No. 23042, S-412. Sample of Frankfurts manufactured by Henning

Sausage Co., Saginaw, and found with John King, Saginaw. No statement on package to indicate the presence of cereal.

No. 23052, S-397. Sample of Frankfurts manufactured by Peters Bros., Saginaw. No statement on package to indicate the presence of cereal.

No. 23055, S-400. Sample of Frankfurts manufactured by Chas. L. Hunt, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23057, S-402. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and found with Asa Sias, Saginaw. No statement on package to indicate the presence of cereal.

No. 23058, S-403. Sample of Bologna manufactured by the Henning Sausage Co., Saginaw, and found with A. Gluck, Saginaw. No statement on package to indicate the presence of cereal.

No. 23059, S-404. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw. No statement on the package to indicate the presence of cereal.

No. 23060, S-405. Sample of Frankfurts procured from Wm. Schmidt, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23061, S-406. Sample of Frankfurts manufactured by M. W. Kundinger, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23062, S-407. Sample of Frankfurts procured from L. Smith, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23098, S-415. Sample of Frankfurts procured from Chas. J. Moll, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23099, S-416. Sample of Frankfurts manufactured by Adolph P. Carle, Saginaw. No statement on the label to indicate the presence of cereal.

No. 23100, S-417. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and procured from Fred Beuthin, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23102, S-419. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and procured from Chas. L. Ahlgrim, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23106, S-423. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and procured from Victor J. Tatham, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23108, S-425. Sample of Frankfurts manufactured by Henning Sausage Co., Saginaw, and procured from D. R. Cuthbertson & Co., Saginaw. No statement on the package to indicate the presence of cereal.

No. 23110, S-427. Sample of Bologna manufactured by Wm. Wolpert & Sons, Saginaw. No statement on the package to indicate the presence of cereal.

No. 23208, I-1453. Sample of Hamburg Steak from Cornelius Sagers, Kalamazoo. Contains sulphites. Not permissible in food products.

No. 23559, S-466. Sample of Frankfurts manufactured by John Pawloski, Pontiac. No statement on package to indicate the presence of cereal.

No. 23560, S-467. Sample of Frankfurts manufactured by Beatie &

Barnard, Pontiac. No statement on package to indicate the presence of cereal.

No. 23561, S-468. Sample of Frankfurts manufactured by Parker, Webb & Co., Detroit, and procured from W. P. Webb, Pontiac. No statement on package to indicate the presence of cereal.

No. 23562, S-469. Sample of Frankfurts manufactured by Parker, Webb & Co., Detroit, and procured from Holloway Bros., Pontiac. No statement on label to indicate the presence of cereal.

No. 23563, S-470. Sample of Frankfurts manufactured by Isaac Walters, Pontiac. No statement on package to indicate the presence of cereal.

No. 23634, G-524. Sample of Bologna Sausage manufactured by H. Bittner, Escanaba. No statement on package to indicate presence of cereal.

No. 23636, G-526. Sample of Bologna Sausage manufactured by Breitenbach Bros., North Escanaba. No statement on package to indicate the presence of cereal.

No. 23637, G-527. Sample of Bologna Sausage manufactured by Peter Jungers, Escanaba. No statement on package to indicate the presence of cereal.

No. 23644, S-480. Sample of Frankfurts procured from Bazley's Market, Flint. No statement on package to indicate the presence of cereal.

No. 23645, S-481. Sample of Frankfurts manufactured by and procured from W. F. Hoops, Flint. No statement on package to indicate the presence of cereal.

No. 23648, S-485. Sample of Hamburg Steak manufactured by and procured from Van Lue Bros., Flint. Contains sulphites, a preservative not permissible in food products.

No. 23649, S-486. Sample of Frankfurts procured from Gregory De Lisle, Flint. Contains sulphites, a preservative not permissible in food products.

No. 23650, S-487. Sample of Frankfurts manufactured by the Henning Sausage Co., Saginaw, and procured from Adam Kettermann, Flint. No statement on the package to indicate the presence of cereal.

No. 23652, S-489. Sample of Frankfurts manufactured by the Henning Sausage Co., Saginaw, and procured from Hodges Bros., Flint. No statement on the package to indicate the presence of cereal.

No. 23653, S-490. Sample of Frankfurts manufactured by Parker, Webb & Co., Detroit, and procured from Jones & Wall, Flint. No statement on the package to indicate the presence of cereal.

No. 23654, S-491. Sample of Bologna Sausage manufactured by Walcott Bros., Flint, and procured from R. D. Cone, Flint. Sample contains sulphites, a preservative not permissible in food products.

No. 23656, S-493. Sample of Frankfurts manufactured by the Henning Sausage Co., Saginaw, and procured from Buell Bros., Flint. No statement on the package to indicate the presence of cereal.

No. 23657, S-494. Sample of Frankfurts procured from John F. Wolcott & Son, Flint. No statement on the package to indicate the presence of cereal.

No. 23714. Unofficial. Sample of Head Cheese. Pieces of meat with hog bristles still attached.

No. 23721, I-1521. Sample of Frankfurts procured from Moon & Aldrich, Battle Creek. No statement on the package to indicate the presence of cereal.

No. 23751, I-1525. Sample of Bologna manufactured by Bergman & Yaw, Battle Creek. No statement on the package to indicate the presence of cereal.

No. 23762, S-515. Sample of Hamburg Steak manufactured by E. H. Woschnak, West Saginaw. Contains sulphites, held to be injurious to health.

No. 23823, V-301. Sample of Hamburg Steak manufactured by James Polley, Grand Rapids. Contains sulphites, held to be injurious to health.

No. 23824, V-302. Sample of Hamburg Steak manufactured by Pastoor Bros., Grand Rapids. Contains sulphites, held to be injurious to health.

No. 23908, S-534. Sample of Hamburg Steak manufactured by Buell Bros., Flint. Contains sulphites, held to be injurious to health.

No. 23823, V-301. Sample of Hamburg Steak manufactured by James Polley, Grand Rapids. Product contains sulphites, a preservative not permissible in food products.

No. 23824, V-302. Sample of Hamburg Steak manufactured and sold by Pastoor Bros., Grand Rapids. Product contains sulphites, a preservative not permissible in food products.

No. 23908, S-534. Sample of Hamburg Steak manufactured and sold by Buell Bros., Flint. Product contains sulphites, a preservative not permissible in food products.

No. 24250, I-1578. Sample of Bologna manufactured by Richard Wirsing, Jackson, and procured from George W. Houck, Jackson. No statement on the label to indicate the presence of cereal.

No. 24335, S-564. Sample of Hamburg Steak manufactured by the Bazley Market Co., Flint. Product contains sulphites, a preservative not permissible in food products.

No. 24336, S-565. Sample of Hamburg Steak manufactured by W. C. Wolcott, Flint. Product contains sulphites, a preservative not permissible in food products.

No. 24337, S-566. Sample of Hamburg Steak manufactured by W. F. Hoops, Flint. Product contains sulphites, a preservative not permissible in food products.

No. 24339, S-568. Sample of Hamburg Steak manufactured by Jones & Wooll, Flint. Sample contains sulphites, a preservative not permissible in food products.

No. 24341, S-570. Sample of Meat procured from Arthur J. Sly, Flint. Sample has undergone decomposition and is therefore unfit for human consumption.

No. 24602, S-587. Sample of Beef procured from Davidson Bros., Bellevue. Sample consists of a decomposed animal substance and is unfit for human food.

MILK.

No. 19469, T-5. Sample of Milk. Below standard in butter fat.

No. 19473, T-9. Sample of Milk. Below standard in butter fat and total solids.

No. 19558, F-21. Sample of Milk. Below standard in total solids and butter fat. Contains small amount of added water.

No. 19679, F-33. Sample of Milk. Below standard in specific gravity and total solids. Contains added water.

No. 19746, I-1053. Sample of Milk. Below standard in total solids.

No. 19824, Z-138. Sample of Milk. Below standard in butter fat and specific gravity. Contains added water.

No. 19909, S-166. Sample of Milk. Below standard in butter fat and total solids. Skimmed.

No. 19942, I-1089. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 19979, I-1111. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 19988, I-1120. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 19992, P-130. Sample of Milk. Below standard in solids and butter fat. Low grade milk.

No. 19996, P-134. Sample of Milk. Below standard in solids and butter fat.

No. 20062, P-147. Sample of Milk. Below standard in solids, fat and specific gravity.

No. 20064, P-149. Sample of Milk. Below standard in solids and specific gravity.

No. 20065, P-150. Sample of Milk. Below standard in solids and specific gravity.

No. 10107, Z-167. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 20148, U-121. Sample of Milk. Below standard in solids, fat and specific gravity. Contains added water.

No. 20155, U-128. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 20203, U-132. Sample of Milk. Below standard in solids and probably contains water.

No. 20211, U-140. Sample of Milk. Below standard in solids and specific gravity. Contains a little added water.

No. 20229, Z-186. Sample of Milk. Below standard in solids and specific gravity.

No. 20258, R-11. Sample of Milk. Below standard in solids and specific gravity. Contains a little water.

No. 20263, R-16. Sample of Milk. Below standard in solids and specific gravity.

No. 20265, R-18. Sample of Milk. Below standard in solids and specific gravity. Contains added water.

No. 20271, Z-193. Sample of Milk. Below standard in solids and butter fat.

No. 20272, Z-233. Sample of Milk. Below standard in butter fat and solids.

No. 20273, Z-237. Sample of Milk. Below standard in solids and butter fat.

No. 20381, G-155. Sample of Milk. Low in solids and fat.

No. 20611, W-13. Sample of Milk from H. F. Slocum, Lansing. Below standard in butter fat and total solids.

No. 20618, W-20. Sample of Milk from N. H. Winans & Son, Lansing. Below standard in total solids and butter fat.

No. 20743, Z-267. Sample of Milk from Fred Boyed, Waldron. Below standard in butter fat and total solids. Low grade milk.

No. 20773, N-7. Sample of Milk from John Filmerhausen, Reed City. Below standard in butter fat and total solids. Low grade milk.

No. 21057, P-227. Sample of Milk from Wm. Tattersall, Sturgis. Below standard in specific gravity, butter fat and total solids. Contains added water.

No. 21075, P-235. Sample of Milk produced by Chas. Hoopengartner, Sturgis, and sold by J. F. Bobilya, Sturgis. Below standard in specific gravity and total solids. Contains added water.

No. 21552, P-249. Sample of Milk from Chas. Hoopengartner, Sturgis, R. F. D. Below standard in specific gravity and total solids. Contains added water.

No. 21553, P-250. Sample of Milk from Chas. Hoopengartner, Sturgis, R. F. D. Below standard in specific gravity.

No. 21554, P-251. Sample of Milk from Chas. Hoopengartner, Sturgis, R. F. D. Below standard in specific gravity and total solids. Contains added water.

No. 21555, P-252. Sample of Milk from Chas. Hoopengartner, Sturgis, R. F. D. Below standard in specific gravity and total solids. Contains added water.

No. 23114. Unofficial. Sample of Milk. Sample has been skimmed and watered.

No. 23193, X-304. Sample of Milk from James Warrington, Leslie. Below standard in specific gravity and total solids. Contains added water.

No. 23225, Z-315. Sample of Milk procured from Washington Smith, Perrinton. Below standard in solids. A part of the cream had been removed.

No. 23227, Z-317. Sample of Milk procured from John Wang, Pompeii. Below standard in solids. A part of the cream had been removed.

No. 23256. Unofficial. Sample of Milk. Skimmed.

No. 23271, G-482. Sample of Milk procured from Thos. Banick, Calumet. Below standard in specific gravity and total solids. Contains about 30% added water.

No. 23312, P-271. Sample of Milk from S. E. Colgrove, Restaurant, Kalamazoo. Below standard in fat and total solids. A part of the cream had been removed.

No. 23320. Unofficial. Sample of Milk. Contains added water.

No. 23368, Z-331. Sample of Milk procured from C. A. Clapp, Osseo. Below standard in specific gravity. Contains a small amount of added water.

No. 23370, Z-333. Sample of Milk procured from T. Botruff, Osseo. Below standard in specific gravity and total solids. Contains added water.

No. 23371, Z-334. Sample of Milk procured from C. Benjamin, Osseo. Below standard in specific gravity, butter fat and total solids. Sample contains added water.

No. 23372, Z-335. Sample of Milk procured from Will Harrington, Osseo, R. F. D. No. 28. Below standard in specific gravity. Contains added water.

No. 23426, P-272. Sample of Milk procured from L. Georgoposlos, Kalamazoo. Below standard in butter fat and total solids. A part of the cream has been removed.

No. 23429, P-275. Sample of Milk procured from Wm. Nastos, Kalamazoo. Below standard in butter fat and total solids. A part of the cream has been removed.

No. 23434, Z-349. Sample of Milk procured from P. Nolan, Milan. Does not comply with the standard for milk. Sample is whole milk with skimmed milk added.

No. 23435, Z-350. Sample of Milk procured from J. W. Rusk, Milan. Below standard in specific gravity and total solids. Contains added water.

No. 23555, P-278. Sample of Milk procured from Central Hotel, Kalamazoo. Below standard in butter fat. Whole milk to which skimmed milk has been added.

No. 23630, Z-364. Sample of Milk procured from Geo. W. Hallstein, Azalia. Below standard in butter fat and total solids.

No. 23631, Z-365. Sample of Milk procured from John W. Rusk, Milan, R. F. D. No. 4. Sample is below standard in specific gravity and total solids. Contains added water.

No. 23662, J-1. Sample of Milk procured from J. Bowman, Mt. Clemens, R. F. D. No. 2. Below standard in specific gravity, butter fat and total solids. Contains 50% added water.

No. 23679, P-295. Sample of Milk procured from Adrian A. Neal, Kalamazoo. Below standard in specific gravity and total solids. Contains about 40% added water.

No. 23716, N-1. Sample of Milk from Lyman Ordiway, Gladwin. Sample is whole milk to which skimmed milk has been added.

No. 23736, G-558. Sample of Milk procured from Sylvester Sandretto, Hancock. Below standard in fat and total solids.

No. 23864, S-531. Sample of Milk from Wesley Crown, Lansing. Sample is watered.

No. 23865, S-532. Sample of Milk from L. F. Bosworth, Lansing, R. F. D. No. 1. Below standard in butter fat and total solids.

No. 23866, S-533. Sample of Milk from L. F. Bosworth, Lansing, R. F. D. No. 1. Below standard in butter fat and total solids.

No. 24049, P-298. Sample of Milk from W. H. Hunter, Lansing. Impure milk, contains visible dirt.

No. 24050, P-299. Sample of Milk from A. R. DeGraw, Lansing. Impure milk, contains visible dirt.

No. 24051, P-300. Sample of Milk from L. O'Leary, Lansing. Impure milk, contains visible dirt.

No. 24052, P-301. Sample of Milk from Weigman Co., Lansing. Impure milk, contains visible dirt.

No. 24053, P-302. Sample of Milk produced by Bert Slocum, Lansing, and procured from F. J. Free, Lansing. Impure milk, contains visible dirt.

No. 24054, P-303. Sample of Milk from Chas. Tank, Lansing. Impure milk, contains visible dirt.

No. 24055, P-304. Sample of Milk from C. C. Allen, Lansing. Impure milk, contains visible dirt.

No. 24056, P-305. Sample of Milk from Frank L. Smedley, Lansing. Impure milk, contains visible dirt.

No. 24057, P-306. Sample of Milk from C. W. Hazelton, Lansing. Impure milk, contains visible dirt.

No. 24058, P-307. Sample of Milk from E. D. Jessup, Lansing. Impure milk, contains visible dirt.

No. 24059, P-308. Sample of Milk procured from the Boston Cafe, Lansing. Below standard in fat and solids, skimmed.

No. 24060, P-309. Sample of Milk procured from Bayley's Restaurant, Lansing. Below standard in butter fat and total solids. A part of the cream has been removed.

No. 24063, P-312. Sample of Milk handled by Morrison Bros., and procured from James Baker, Lansing. Impure milk, contains visible dirt.

No. 24070, P-314. Sample of Milk procured from E. S. Hedley, Lansing. Impure milk, contains visible dirt.

No. 24071, P-315. Sample of Milk procured from Roy B. Moore, Lansing. Impure milk, contains visible dirt.

No. 24072, P-316. Sample of Milk procured from D. G. Rapp, Lansing. Impure milk, contains visible dirt.

No. 24074, P-318. Sample of Milk from Morrison Bros., Lansing. Above standard in specific gravity. Below standard in butter fat and total solids. A part of the cream has been removed.

No. 24075, P-319. Sample of Milk from N. H. Winans & Son, Lansing. Impure milk, contains visible dirt.

No. 24076, P-320. Sample of Milk from N. H. Winans & Sons, Lansing. Impure milk, contains visible dirt.

No. 24077, P-321. Sample of Milk from W. H. Hunter, Lansing. Impure milk, contains visible dirt.

No. 24078, P-322. Sample of Milk from Morrison Bros., Lansing. Impure milk, contains visible dirt.

No. 24079, P-323. Sample of Milk from A. R. DeGraw, Lansing. Impure milk, contains visible dirt.

No. 24104, P-325. Sample of Milk from N. H. Winans & Sons, Lansing. Impure milk, contains visible dirt.

No. 24105, P-326. Sample of Milk from John Rehm, Lansing. Impure milk, contains visible dirt.

No. 24106, P-327. Sample of Milk procured from J. L. Snyder, East Lansing. Impure milk, contains visible dirt.

No. 24107, P-328. Sample of Milk from N. H. Winans & Sons, Lansing. Impure milk, contains visible dirt.

No. 24108, P-329. Sample of Milk from N. H. Winans & Sons, Lansing. Impure milk, contains visible dirt.

No. 24110, P-331. Sample of Milk procured from A. Schweigert, Lansing. Impure milk, contains visible dirt.

No. 24111, P-332. Sample of Milk from F. E. Jipson, Lansing. Impure milk, contains visible dirt.

No. 24112, P-333. Sample of Milk from F. E. Jipson, Lansing. Impure milk, contains visible dirt.

No. 24113, P-334. Sample of Milk from F. E. Jipson, Lansing. Impure milk, contains visible dirt.

No. 24122, P-335. Sample of Milk from G. M. Hall, Lansing. Impure milk, contains visible dirt.

No. 24124, P-337. Sample of Milk from W. R. Whitney, Lansing. Impure milk, contains visible dirt.

No. 24126, P-339. Sample of Milk from C. C. Holmes, Lansing. Impure milk, contains visible dirt.

No. 24127, P-340. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from Howard Link, Lansing. Impure milk, contains visible dirt.

No. 24132, P-341. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from S. Spanos, Lansing. Impure milk, contains visible dirt.

No. 24133, P-343. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from A. C. Cross, Lansing. Impure milk, contains visible dirt.

No. 24134, P-344. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from Frank DeLand, Lansing. Impure milk, contains visible dirt.

No. 24135, P-345. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from Chas. Parkham, Lansing. Impure milk, contains visible dirt.

No. 24136, P-346. Sample of Milk sold by N. H. Winans & Sons, Lansing, and procured from the Paris Cafe, Lansing. Below standard in butter fat and total solids. A part of the cream has been removed.

No. 24390. Unofficial. Sample of Milk. Below standard in butter fat and total solids. Skimmed.

No. 24404, P-351. Sample of Milk procured from Geo. E. Bayley, Lansing. Contains an excessive amount of dirt.

No. 24405, P-352. Sample of Milk from Paris Cafe, Lansing. Contains an excessive amount of dirt.

No. 24417, P-353. Sample of Milk procured from C. Force, Okemos. Contains an excessive amount of dirt.

No. 24418, P-354. Sample of Milk from O. F. Tonnwell, Okemos. Contains an excessive amount of dirt.

No. 24419, P-355. Sample of Milk procured from L. Dear, Okemos. Below standard in butter fat and total solids, and contains an excessive amount of dirt.

No. 24420, P-356. Sample of Milk from Ed. Bergen, Okemos. Contains an excessive amount of dirt.

No. 24421, P-357. Sample of Milk from C. A. Wilson, Okemos. Contains an excessive amount of dirt.

No. 24422, P-358. Sample of Milk from C. Klotz, Okemos. Impure milk, contains an excessive amount of dirt.

No. 24423, P-359. Sample of Milk from W. L. Smith, Okemos. Impure milk, contains an excessive amount of dirt.

No. 24425, P-361. Sample of Milk from F. Prothnow, Okemos. Impure milk, contains an excessive amount of dirt.

No. 24426, P-362. Sample of Milk from W. F. Hewitt, Okemos. Impure milk, contains an excessive amount of dirt.

No. 24427, P-363. Sample of Milk from George Hoskins, Okemos. Impure milk, contains an excessive amount of dirt.

- No. 24428, P-364. Sample of Milk from W. O. Wilson, Okemos. Impure milk, contains an excessive amount of dirt.
- No. 24430, P-367. Sample of Milk from H. Covert, Lansing. Impure milk, contains an excessive amount of dirt:
- No. 24431, P-368. Sample of Milk from L. L. Blowman, Lansing. Impure milk, contains an excessive amount of dirt.
- No. 24432, P-369. Sample of Milk from F. Kloeppfer, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 34033, P-370. Sample of Milk from Ernest L. Clark, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24434, P-371. Sample of Milk from D. C. Garlock, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24436, P-373. Sample of Milk from C. H. McRoberts, Grand Ledge. Below standard in butter fat and total solids.
- No. 24437, P-374. Sample of Milk from F. R. Waidelelich, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24438, P-375. Sample of Milk from F. I. Slade, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24439, P-376. Sample of Milk from B. W. Brandel, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24440, P-377. Sample of Milk from A. Oppenlander, Lansing. Not a pure milk, contains an excessive amount of dirt.
- No. 24441, P-378. Sample of Milk from E. F. Crosby, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.
- No. 24442, P-379. Sample of Milk from F. Pung, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24443, P-380. Sample of Milk from O. B. Dell, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24444, P-381. Sample of Milk from H. N. Webb, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24445, P-382. Sample of Milk from L. Knaup, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24446, P-383. Sample of Milk from E. Zischke, DeWitt. Below standard in butter fat and total solids. Contains an excessive amount of dirt.
- No. 24447, P-384. Sample of Milk from Albert Yane, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24448, P-385. Sample of Milk from T. Byra, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24449, P-386. Sample of Milk from L. Lietske, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24450, P-387. Sample of Milk from J. Siple, DeWitt. Not a pure milk, contains an excessive amount of dirt.
- No. 24451, P-388. Sample of Milk from J. Boichot, Lansing. Not a pure milk, contains an excessive amount of dirt.
- No. 24452, P-389. Sample of Milk from Chas. Redoutey, Lansing. Not a pure milk, contains an excessive amount of dirt.
- No. 24453, P-390. Sample of Milk from L. J. Boichot, Lansing. Not a pure milk, contains an excessive amount of dirt.
- No. 24454, P-391. Sample of Milk from Fred Tueke, DeWitt. Not a pure milk, contains an excessive amount of dirt.

No. 24456, P-393. Sample of Milk from J. M. Smith, Grand Ledge. Below standard in butter fat.

No. 24457, P-394. Sample of Milk from J. Biebshiemer, Lansing. Not a pure milk, contains an excessive amount of dirt.

No. 24458, P-395. Sample of Milk from F. Well, Lansing. Not a pure milk, contains an excessive amount of dirt.

No. 24459, P-396. Sample of Milk from Elmer Sheets, Lansing. Not a pure milk, contains an excessive amount of dirt.

No. 24460, P-397. Sample of Milk from F. W. Calhoun, Lansing. Not a pure milk, contains an excessive amount of dirt.

No. 24461, P-398. Sample of Milk from W. Ladu, Lansing. Not a pure milk, contains an excessive amount of dirt.

No. 24462, P-399. Sample of Milk from O. Felske, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.

No. 24463, P-400. Sample of Milk from John Divine, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.

No. 24464, P-401. Sample of Milk from T. F. Buehler, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.

No. 24465, P-402. Sample of Milk from Frank Benjamin, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.

No. 24466, P-403. Sample of Milk from F. Brunger, Grand Ledge. Not a pure milk, contains an excessive amount of dirt.

No. 24560, W-53. Sample of Milk from L. M. Wood, Charlotte. Below standard in butter fat.

MINCE MEAT.

No. 23340, S-449. Sample of Mince Meat, Majestic Brand, handled by Schwartzchild & Sulzberger Co., Saginaw. Not sufficient meat present.

No. 23402, U-262. Sample of Moloney's Superior Mince Meat manufactured by Thomas Moloney, Detroit. Not sufficient meat present.

No. 23403, U-263. Sample of Bismark Brand Mince Meat manufactured by Reid, Murdock & Co., Chicago. Not sufficient meat present.

No. 23407, U-267. Sample of Bricks Nonpariel Bulk Mince Meat manufactured by Edgar Brick, Crosswicks, N. J. Not sufficient meat present.

No. 23408, U-268. Sample of Baker's Mince Meat sold in bulk, manufactured by E. B. Gallagher & Co., Detroit. Not sufficient meat present.

No. 23411, U-271. Sample of Bulk Mince Meat manufactured by W. E. Heames & Co., Detroit. Not sufficient meat present.

No. 23412, U-272. Sample of Chef Package Mince Meat manufactured by Berdan & Co., Toledo, Ohio. Not sufficient meat present.

No. 23415, U-275. Sample of Bulk Mince Meat manufactured by Libby, McNeil & Libby, Chicago. Not sufficient meat present.

No. 23441, V-279. Sample of Home Made Mince Meat manufactured by A. S. Livermore, Chicago. Not sufficient meat present.

No. 23445, V-283. Sample of Banquet Brand Mince Meat manufactured by G. H. Hammond Co., Chicago. Not sufficient meat present.

No. 23447, V-285. Sample of Acme Mince Meat manufactured by W. H. Marvin Co., Urbana, Ohio. Not sufficient meat present.

No. 23448, V-286. Sample of Quaker Mince Meat manufactured by W. H. Marvin Co., Urbana, Ohio. Not sufficient meat present.

No. 23449, V-287. Sample of Gutchess Mince Meat manufactured by H. C. Gutchess, Port Byron, N. Y. Not sufficient meat present.

MUSTARD PREPARATIONS.

No. 21018, I-1276. Sample of Mustard Relish manufactured by Farington & Whitney, New York. Not properly labeled.

No. 21559, G-280. Sample of Spiced Mustard Dressing procured from John P. Roach, Norway. Not properly labeled.

No. 23074, G-449. Sample of Spiced Mustard Dressing packed for Rust, Parker, Martin Co., Duluth, Minn. Improperly labeled.

No. 23075, G-450. Sample of Mustard Dressing prepared for Gowan. Peyton, Twohy Co., Duluth, Minn. Sold by Samuel Reid, Ironwood. Improperly labeled.

No. 23125, I-1446. Sample of "Pure Mustard" manufactured by King Cereal & Mfg. Co., Chicago, handled by Myers Grocery Co., Chicago, as jobbers and found with James P. Ryan, Bangor. Improperly labeled.

No. 24516, I-1574. Sample UNXLD Mustard Relish sold by Brown, Davis & Warner, Jackson, and procured from the store of Wm. H. Necker, Jackson. Misbranded.

No. 24575, S-584. Sample of French Mustard manufactured by Excelsior Mustard Mills, New York, and handled by Phipps, Penoyer & Co., Saginaw. Misbranded.

OLEOMARGARINE.

No. 21291, G-276. Sample of Oleomargarine sold by John Hanson, Iron Mountain. Not properly branded or stamped.

No. 23140, P-259. Sample of Oleomargarine sold by L. C. Snearly, Battle Creek. No sign displayed.

No. 21446, I-1450. Sample of Oleomargarine sold by A. M. Todd Co., Mentha. Package not stamped on outside and contained no ingredient slip.

No. 23395, I-1466. Sample of Oleomargarine procured from M. De Looft, Kalamazoo. Package not properly stamped.

OILS.

No. 20669, K-77. Sample of "Pure Italian Olive Oil" handled by Austin Nichols & Co., New York. Sample is adulterated with sesame oil.

No. 20716, G-171. Sample of Olive Oil handled by E. R. Godfrey & Son, Houghton, and found with E. F. Sutton, Lake Linden. Sample is adulterated with cottonseed oil.

No. 21065, U-180. Sample of Olive Oil handled by Michigan Grocer Co., Detroit. No manufacturer's name or address on label. Improperly labeled.

No. 21257, G-275. Sample of Virgin Olive Oil handled by Joannes Bros., Green Bay, Wis., found with W. H. Scandling, Iron Mountain. Manufacturer's name not on bottle. Not properly labeled.

No. 21293, G-278. Sample of Olive Oil handled by Hugo Epstein & Co., Chicago, and found with M. Levy & Co., Iron Mountain. Manufacturer's name and address not stated on the label. Not properly labeled.

No. 23248, G-473. Sample of Castor Oil manufactured by Puhl-Webb

Co., Chicago, Ill., and found with Vertin Bros., Calumet. Not castor oil.

No. 23624, U-302. Sample of Olive Oil handled by Austin, Nichols & Co., New York, and procured from W. G. Bell, 245 Grand River Ave., Detroit. No manufacturer's name and address on label. Misbranded.

OYSTERS.

No. 23130, P-258. Sample of Oysters sold by Herman Scholz, Battle Creek. The oysters contained about 10% added water.

No. 23131, I-1448. Sample of Oysters procured from Brennan's Restaurant, Ann Arbor. Sample contained about 20% added water.

No. 23132, I-1449. Sample of Oysters procured from Johnson Bros., Ann Arbor. Sample contained about 20% added water.

PANCAKE FLOUR.

No. 19359, K-36. Sample of Hot-En-Tot Pancake Flour sold by Peter Smith & Sons, Detroit. Weight not marked on package.

PEAS.

No. 20801, S-191. Sample of French Peas sold by Wm. B. Anderson, Pontiac. Contain copper sulphate, held to be injurious to health.

No. 24474, G-604. Sample of Soaked Peas sold by E. M. Lieblin, Houghton. Word "soaked" is not in proper sized type. Misbranded.

PEPPER.

No. 20802, S-193. Sample of Pepper manufactured by the Valley City Coffee & Spice Co., Saginaw, and handled by Lee & Cady, Detroit. Does not comply with the standard for black pepper.

No. 23710, S-500. Sample of Black Pepper manufactured by Gehlert Coffee Co., Detroit, and procured from H. A. Johnson, Durand. Contains material foreign to black pepper.

No. 23776, S-523. Sample of Black Pepper sold by G. Alderton & Co., West Saginaw, and found with M. Quinlan, West Saginaw. Above the legal standard in crude fibre content.

PIE FILLING.

No. 19176, S-63. Sample of Pie Filling handled by the Lapeer Mercantile Co., Lapeer. Composed in part of glucose and dried fruit, artificially colored. Not salable.

PRESERVATIVES.

No. 19360, U-18. Sample of XXX Preservaline sold by Asmus Bros., Detroit. Not permissible for use in food products.

No. 19391. Unofficial. Sample of Cromosa. Not permissible for use in ice cream.

No. 19392. Unofficial. Sample of L. C. A. Preservaline for Ice Cream. Not permissible.

No. 20100, V-77. Sample of Zanzarine found with Henry Daane, Grand Rapids. Not permissible as an artificial coloring in meats.

No. 20201, V-78. Sample of Preservaline found with Piper Ice Cream Co., Grand Rapids. Not permissible in ice cream.

No. 21305. Unofficial. Sample of Iceine. Contains sulphites and is not permissible in food products.

No. 22027, I-1429. Sample of XXX Preservaline manufactured by the Preservaline Manufacturing Co., New York, handled by the Grand Rapids Butchers Supply Co., and procured from Henry Brown, Benton Harbor. Sample contains sulphites. Not permissible in food products.

No. 23275, V-275. Sample of Preservaline manufactured by the Preservaline Manufacturing Co., New York, handled by the Grand Rapids Butchers Supply Co., Grand Rapids, and procured from C. A. Van Allsburg, Hart. Sample contains salts of boric acid. Not permissible as a preservative in food products.

No. 23454, V-290. Sample of Special 77 Preservaline manufactured by the Preservaline Manufacturing Co., Brooklyn, N. Y., handled by the Grand Rapids Butchers Supply Co., Grand Rapids, and procured from Rau Bros., Big Rapids. Contains sodium benzoate. Not permitted as a preservative in food products unless stated on the label.

No. 23541. Sample of Cider Preservative. Contains sodium benzoate and cannot be used unless stated on the label.

No. 23064, V-265. Sample of Preservaline manufactured by the Preservaline Manufacturing Co., Brooklyn, N. Y., handled by Grand Rapids Butchers Supply Co., Grand Rapids, and found with Joe Doucette, Shelby. The sample contains boric acid and is not permissible in food products.

No. 23703, S-482. Sample of Boar Brand Preservaline "C" manufactured by the Preservaline Manufacturing Co., New York, and procured from W. F. Hoops, Flint. Product contains boric acid or salts thereof and is not permissible as a preservative of food products.

No. 23704, S-483. Sample of XXX Preservative manufactured by the Preservaline Manufacturing Co., New York, and procured from W. F. Hoops, Flint. Product contains sulphites and is not permissible as a preservative in food products.

No. 23708, S-498. Sample of Freeze-em manufactured by B. Heller Co., Chicago, and procured from N. B. Smith & Co., Durand. Product contains sulphites and is not permissible as a preservative of food products.

No. 23722, I-1522. Sample of I. X. L. Preservative manufactured by B. Heller & Co., Chicago, and procured from J. A. Keyes & Co., Battle Creek. Product contains sulphites and is not permissible as a preservative of food products.

No. 23763, S-516. Sample of Zero manufactured by the Illinois Casing Co., Chicago, and found with E. H. Woschnak, West Saginaw. Product contains sulphites and salicylic acid and is not permissible in food products.

No. 23666, I-1513. Sample of Chilling Powder Preservative manufactured by the Goodale Drug Co., Battle Creek, and found with Seward & McDowell, Battle Creek. Product contains sulphites and salicylic acid and is not permissible in food products.

No. 24096, I-1575. Sample of XXX Preservaline manufactured by the Preservaline Manufacturing Co., Brooklyn, N. Y., and found with Wag-

ner Bros., Kalamazoo. Sample contains sodium sulphite, a preservative not permissible in food products.

PRESERVES.

No. 24037, G-582. Sample of Preserves manufactured by the St. Louis Syrup and Preserving Co., St. Louis, Mo. Misbranded.

SOFT DRINKS.

No. 20122, K-84. Sample of Imitation Strawberry Soda manufactured by Schwab Bros., St. Clair. Contains saccharin.

No. 21024, K-86. Sample of Birch Beer manufactured by Schwab Bros., St. Clair. Contains saccharin.

No. 20123, K-85. Sample of Ginger Ale manufactured by Schwab Bros., St. Clair. Contains saccharin.

No. 21239, Z-279. Sample of Jersey Creme from Sullivan & Co., Lansing. Contains saccharin. Old stock.

No. 23436, G-497. Sample of Jersey Creme procured from C. L. Hansen, Menominee. Contains saccharin. Old stock.

No. 23670, V-296. Sample of Jersey Creme Syrup handled by the Grand Haven Bottling Works, Grand Haven. Contains saccharin. Old stock.

No. 23671, V-297. Sample of Jersey Creme Syrup from Grand Haven Bottling Works, Grand Haven. Contains saccharin. Old stock.

No. 23681, Unofficial. Sample of Jersey Creme. Saccharin present. Old stock.

No. 21258, X-281. Sample of Lemon Soda from W. J. Keith, Lansing. Contains saccharin.

No. 21259, X-282. Sample of Ginger Ale from W. J. Keith, Lansing. Contains saccharin.

No. 21260, X-283. Sample of Birch Beer from W. J. Keith, Lansing. Contains saccharin.

No. 21261, X-284. Sample of Rasport from W. J. Keith, Lansing. Contains saccharin.

No. 21262, X-285. Sample of Orange Phosphate from W. J. Keith, Lansing. Contains saccharin.

No. 21263, X-286. Sample of Root Beer from W. J. Keith, Lansing. Contains saccharin.

No. 21264, X-287. Sample of Cream Soda from W. J. Keith, Lansing. Contains saccharin.

No. 21266, X-289. Sample of Iron Port from W. J. Keith, Lansing. Contains saccharin.

No. 21267, X-290. Sample of Plezee from W. J. Keith, Lansing. Contains saccharin.

No. 21268, X-291. Sample of Champagne Cider from W. J. Keith, Lansing. Contains saccharin.

No. 21269, X-292. Sample of Lemon Sour from W. J. Keith, Lansing. Contains saccharin.

No. 21270, X-293. Sample of Strawberry from W. J. Keith, Lansing. Contains saccharin.

No. 21272, K-97. Sample of Strawberry Soda manufactured by Gruel & Ott, Port Huron. Contains saccharin.

- No. 21273, K-98. Sample of Lemon Soda manufactured by Gruel & Ott, Port Huron. Contains saccharin.
- No. 21274, K-99. Sample of Root Beer manufactured by Gruel & Ott, Port Huron. Contains saccharin.
- No. 21276, K-101. Sample of Orange Cider manufactured by Gruel & Ott, Port Huron. Contains saccharin.
- No. 21306, S-330. Sample of Rasport manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21307, S-331. Sample of Orange Soda manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21308, S-332. Sample of Strawberry Pop manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21309, S-333. Sample of Birch Beer manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21310, S-334. Sample of Jersey Creme manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21311, S-335. Sample of Ginger Ale manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21312, S-336. Sample of Still Cherry manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21313, S-337. Sample of Cream Soda manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21314, S-338. Sample of Lemon Sour manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21315, S-339. Sample of Merry Widow High Ball manufactured by Flint Bottling Co., Flint. Contains saccharin.
- No. 21316, S-340. Sample of Strawberry Soda manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21317, S-341. Sample of Lemon Sour manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21318, S-242. Sample of Ginger Ale manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21319, S-343. Sample of Birch Beer manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21320, S-344. Sample of Jersey Creme manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21321, S-345. Sample of Still Orange manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21322, S-346. Sample of Still Cherry manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21323, S-347. Sample of Cream Soda manufactured by Genesee Bottling Works, Flint. Contains saccharin.
- No. 21333, V-156. Sample of Imitation Strawberry manufactured by S. Meretsky, Grand Rapids. Contains saccharin.
- No. 21334, V-157. Sample of Sarsaparilla manufactured by S. Meretsky, Grand Rapids. Contains saccharin.
- No. 21335, V-158. Sample of Lemon Sour manufactured by S. Meretsky, Grand Rapids. Contains saccharin.
- No. 21336, V-159. Sample of Sherbet manufactured by S. Meretsky, Grand Rapids. Contains saccharin.
- No. 21337, V-160. Sample of Concord Grape manufactured by S. Meretsky, Grand Rapids. Contains saccharin.

No. 21338, V-161. Sample of Orange Cider manufactured by S. Meret-sky, Grand Rapids. Contains saccharin.

No. 21339, V-162. Sample of Ginger Ale manufactured by S. Meret-sky, Grand Rapids. Contains saccharin.

No. 21342, V-165. Sample of Sarsaparilla manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21345, V-168. Sample of Root Beer manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21347, V-170. Sample of Lemon Soda manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21349, V-172. Sample of Jersey Creme manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21350, V-173. Sample of Lemon Sour manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21351, V-174. Sample of Peach Mellow manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21352, V-175. Sample of Chocolate Cream manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21353, V-176. Sample of Raspberry manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21354, V-177. Sample of Cream Soda manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21355, V-178. Sample of Orange Soda manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21358, V-181. Sample of Grape Soda manufactured by A. L. Joyce, Grand Rapids. Contains saccharin.

No. 21360, V-148. Sample of Lemon Sour manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21361, V-149. Sample of Root Beer manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21363, V-151. Sample of Ginger Ale manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21364, V-152. Sample of Gin Seng manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21366, V-146. Sample of Blood Orange manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21367, V-147. Sample of Strawberry manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21368, V-153. Sample of Lemon Soda manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21369, V-154. Sample of Sherbet manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21370, V-155. Sample of Dreamo manufactured by Folgers, 85 Broadway, Grand Rapids. Contains saccharin.

No. 21396, I-1294. Sample of Cherryade manufactured by N. Breid-inger, St. Joseph. Contains saccharin.

No. 21397, I-1295. Sample of Black Soda manufactured by N. Breid-inger, St. Joseph. Contains saccharin.

No. 21398, I-1296. Sample of White Soda manufactured by N. Breid-inger, St. Joseph. Contains saccharin.

No. 21399, I-1297. Sample of Red Soda manufactured by N. Breid-inger, St. Joseph. Contains saccharin.

No. 21400, I-1298. Sample of Kos-Kola-Pop manufactured by N. Breidinger, St. Joseph. Contains saccharin.

No. 21401, I-1299. Sample of Ginger Ale manufactured by N. Breidinger, St. Joseph. Contains saccharin.

No. 21412, F-92. Sample of Cherry Phosphate manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21413, F-93. Sample of Appleade Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21414, F-94. Sample of Maple Cream Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21415, F-95. Sample of Orange Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21418, F-98. Sample of Cream Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21419, F-99. Sample of Raspberry manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21423, F-103. Sample of Pear Cider manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21424, F-104. Sample of Lemon Sour manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21426, F-106. Sample of Ple Zee manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21427, F-107. Sample of Cherry Cheer manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21429, F-109. Sample of Grape Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21430, F-110. Sample of Sarsaparilla manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21431, F-111. Sample of Chocolate manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21432, F-112. Sample of Peach Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21434, F-114. Sample of Jersey Creme bottled by A. L. Joyce, Traverse City. Contains saccharin.

No. 21436, F-116. Sample of Sherbet manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21437, F-117. Sample of Lemon Soda manufactured by A. L. Joyce, Traverse City. Contains saccharin.

No. 21440, I-1303. Sample of Lemon Pop manufactured by Fred Anderson, Benton Harbor. Contains saccharin.

No. 21441, I-1304. Sample of Ginger Ale manufactured by Fred Anderson, Benton Harbor. Contains saccharin.

No. 21442, I-1305. Sample of Lemon Sour manufactured by Fred Anderson, Benton Harbor. Contains saccharin.

No. 21443, I-1306. Sample of Root Beer manufactured by Fred Anderson, Benton Harbor. Contains saccharin.

No. 21444, I-1307. Sample of Strawberry Pop manufactured by Fred Anderson, Benton Harbor. Contains saccharin.

No. 21445, I-1308. Sample of Strawberry Pop manufactured by E. E. Rouse, Benton Harbor. Contains saccharin.

No. 21446, I-1309. Sample of Root Beer manufactured by E. E. Rouse, Benton Harbor. Contains saccharin.

No. 21447, I-1310. Sample of Lemon Pop manufactured by E. E. Rouse, Benton Harbor. Contains saccharin.

No. 21448, I-1311. Sample of Lemon Pop manufactured by E. E. Rouse, Benton Harbor. Contains saccharin.

No. 21449, I-1312. Sample of Ginger Ale manufactured by E. E. Rouse, Benton Harbor. Contains saccharin.

No. 21454, S-373. Sample of Iron Port manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21455, S-374. Sample of Sherbet manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21456, S-375. Sample of Sarsaparilla Soda manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21457, S-376. Sample of Chocolate Cream manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21458, S-377. Sample of Raspberry Cream manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21460, S-368. Sample of Birch Beer manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21461, S-369. Sample of Lemon Sour manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21462, S-370. Sample of Ginger Ale manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21463, S-371. Sample of Orange Cider manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21464, S-372. Sample of Strawberry Soda manufactured by Magnetic Spring Water Co., Saginaw. Contains saccharin.

No. 21465, S-359. Sample of Orange Soda manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21466, S-360. Sample of Cream Soda manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21467, S-361. Sample of Lemon Soda manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21468, S-362. Sample of Birch Beer manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21469, S-363. Sample of Sherbet manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21470, S-364. Sample of Jersey Creme manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21471, S-365. Sample of Orcherade manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21472, S-366. Sample of Cherry Cheer manufactured by John Stafford, Saginaw. Contains saccharin.

No. 21474, F-75. Sample of Cera Soda manufactured by Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21475, F-76. Sample of Strawberry manufactured by Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21476, F-77. Sample of Cocoa manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21477, F-78. Sample of Champagne Cider manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21478, F-79. Sample of Lemon Sour manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21479, F-81. Sample of Birch Beer manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21480, F-82. Sample of Concord Grape manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21481, F-83. Sample of Apple Cider manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21482, F-84. Sample of Orcherade manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21483, F-85. Sample of Raspberry manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21484, F-86. Sample of Chocolate manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21485, F-87. Sample of Lemon Soda manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21486, F-88. Sample of Root Beer manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21487, F-89. Sample of Orange Soda manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21488, F-90. Sample of Ginger Ale manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21489, F-91. Sample of Raspberry Still manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21490, F-80. Sample of Green Seal manufactured by the Queen City Bottling Works, Traverse City. Contains saccharin.

No. 21492, F-119. Sample of Chocolate manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21493, F-120. Sample of Peach Phosphate manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21494, F-121. Sample of Sherbet manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21496, F-123. Sample of Raspberry manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21498, F-125. Sample of Orange Cider manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21499, F-127. Sample of Lemon Sour manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21500, F-128. Sample of Carbonated Raspberry manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21501, F-129. Sample of Sarsaparilla manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21502, F-130. Sample of Orcherade manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21503, F-131. Sample of Root Beer manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21504, F-132. Sample of Ginger Ale manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21505, F-133. Sample of Birch Beer manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21507, F-135. Sample of Lemon Soda manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21509, F-137. Sample of Strawberry manufactured by the Cadillac Bottling Works, Cadillac. Contains saccharin.

No. 21515, V-202. Sample of Cherry manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21516, V-203. Sample of Ginger Ale manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21517, V-204. Sample of Orcherade manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21518, V-205. Sample of Strawberry manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21519, V-206. Sample of Lemon Sour manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21520, V-207. Sample of Birch Beer manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21521, V-208. Sample of Sherbet manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21522, V-209. Sample of Iron Port manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21523, V-210. Sample of Root Beer manufactured by J. J. Spitzley, Ionia. Contains saccharin.

No. 21524, S-379. Sample of Iron Beer manufactured by D. H. Chapman, Caro. Contains saccharin.

No. 21525, S-380. Sample of Root Beer manufactured by D. H. Chapman, Caro. Contains saccharin.

No. 21526, S-381. Sample of Lemon Sour manufactured by D. H. Chapman, Caro. Contains saccharin.

No. 21527, S-382. Sample of Ginger Ale manufactured by D. H. Chapman, Caro. Contains saccharin.

No. 21528, S-383. Sample of Strawberry Soda manufactured by D. H. Chapman, Caro. Contains saccharin.

No. 21538, I-1322. Sample of Lemon Soda manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21539, I-1323. Sample of Strawberry Pop manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21540, I-1324. Sample of Concord Grape manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21541, I-1325. Sample of Cherry Phosphate manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21542, I-1326. Sample of Sarsaparilla manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21543, I-1327. Sample of Coke manufactured by the Kalamazoo Bottling Co., Kalamazoo. Contains saccharin.

No. 21544, I-1328. Sample of Strawberry Pop manufactured by the City Bottling Works, Kalamazoo. Contains saccharin.

No. 21546, I-1330. Sample of Jersey Creme manufactured by the City Bottling Works, Kalamazoo. Contains saccharin.

No. 21547, I-1331. Sample of Lemon Sour manufactured by the City Bottling Works, Kalamazoo. Contains saccharin.

No. 21548, I-1332. Sample of Cocola manufactured by the City Bottling Works, Kalamazoo. Contains saccharin.

No. 21549, I-1333. Sample of Sarsaparilla manufactured by the City Bottling Works, Kalamazoo. Contains saccharin.

No. 21569, G-290. Sample of Lemon Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21570, G-291. Sample of Sarsaparilla Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21571, G-292. Sample of Ginger Ale manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21572, G-293. Sample of Cream Beer manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21573, G-294. Sample of Atlas Brew manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21574, G-295. Sample of Cream Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21575, G-296. Sample of Strawberry Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21576, G-297. Sample of Orange Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21577, G-298. Sample of Cremo manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21578, G-299. Sample of Artificial Raspberry manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21579, G-300. Sample of Iron Soda manufactured by Roger Jackson, Crystal Falls. Contains saccharin.

No. 21580, U-186. Sample of Orange Chavey handled by National Beverage Co., Detroit. Contains saccharin.

No. 21586, U-192. Sample of Ginger Ale manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21588, U-194. Sample of Orange Cider manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21589, U-195. Sample of Cream Soda manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21590, U-196. Sample of Black Pop manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21591, U-197. Sample of Lemon Pop manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21592, U-198. Sample of Wild Cherry Phosphate manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21593, U-199. Sample of Birch Beer manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21594, U-200. Sample of Raspberry Cream manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21595, U-201. Sample of Strawberry Pop manufactured by McBride, Earl & Pollard, Detroit. Contains saccharin.

No. 21596, U-202. Sample of Cream Soda manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21597, U-203. Sample of Lemon Sour manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21598, U-204. Sample of Birch Beer manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21599, U-205. Sample of Cherry Phosphate manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21600, U-206. Sample of Orange Ale manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21601, U-207. Sample of Ginger Ale manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21602, U-208. Sample of Black Pop manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21603, U-209. Sample of Strawberry Pop manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21604, U-210. Sample of Bauana Pop manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21605, U-211. Sample of Lemon Pop manufactured by Herman Westphal, Detroit. Contains saccharin.

No. 21606, U-212. Sample of Orange Cider manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21607, U-213. Sample of Ginger Ale manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21608, U-214. Sample of Birch Beer manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21609, U-215. Sample of Wild Cherry Phosphate manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21610, U-216. Sample of Raspberry Flavor manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21611, U-217. Sample of Cream Soda manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21612, U-218. Sample of Lemon Sour manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21613, U-219. Sample of Black Pop manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21614, U-220. Sample of White Pop manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21615, U-221. Sample of Red Pop manufactured by Wm. J. Stapleton, Detroit. Contains saccharin.

No. 21616, V-183. Sample of Ginger Ale manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21617, V-184. Sample of Strawberry manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21618, V-185. Sample of Orange Cider manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21619, V-186. Sample of Sherbet manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21620, V-187. Sample of Orcherade manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21621, V-188. Sample of Lemon Sour manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21622, V-189. Sample of Root Beer manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21623, V-190. Sample of Kolatona manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21624, V-191. Sample of Cream Soda manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21625, V-192. Sample of Birch Beer manufactured by G. R. Kolatona Co., Grand Rapids. Contains saccharin.

No. 21626, V-211. Sample of Lemon Sour manufactured by W. N. Quackenbush & Son, Holland. Contains saccharin.

No. 21627, V-212. Sample of Root Beer manufactured by W. N. Quackenbush & Son, Holland. Contains saccharin.

No. 21628, V-213. Sample of Iron Beer manufactured by W. N. Quackenbush & Son, Holland. Contains saccharin.

No. 21629, V-214. Sample of Strawberry manufactured by W. N. Quackenbush & Son, Holland. Contains saccharin.

No. 21631, V-216. Sample of Ginger Ale manufactured by W. N. Quackenbush & Son, Holland. Contains saccharin.

No. 21637, V-217. Sample of Root Beer manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21639, V-219. Sample of Ginger Ale manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21640, V-220. Sample of Wild Cherry manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21641, V-221. Sample of Blackberry manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21643, V-223. Sample of Raspberry manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21644, V-224. Sample of Strawberry manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21645, V-225. Sample of Birch Beer manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21646, V-226. Sample of Lemon Sour manufactured by F. Scott, Muskegon. Contains saccharin.

No. 21649, V-224. Sample of Ginger Ale manufactured by Fred Niebuhr & Son, Detroit. Contains saccharin.

No. 21650, U-225. Sample of Lemon Sour manufactured by Fred Niebuhr & Son, Detroit. Contains saccharin.

No. 21651, U-226. Sample of Cherry Phosphate manufactured by Fred Niebuhr & Son, Detroit. Contains saccharin.

No. 21653, U-228. Sample of Black Pop manufactured by Fred Niebuhr & Son, Detroit. Contains saccharin.

No. 21655, U-230. Sample of Orange Ale manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21656, U-231. Sample of Chocolate Cream manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21657, U-232. Sample of Ginger Ale manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21658, U-233. Sample of Lemon Sour manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21659, U-234. Sample of Cream Soda manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21661, U-236. Sample of Lemon Pop manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21662, U-237. Sample of Strawberry Pop manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21663, U-238. Sample of Black Pop manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21664, U-239. Sample of Root Beer manufactured by A. Wegener & Son, Detroit. Contains saccharin.

No. 21665, U-240. Sample of Cherry Phosphate manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21666, U-241. Sample of Cream Soda manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21667, U-242. Sample of Ginger Ale manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21668, U-243. Sample of Root Beer manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21669, U-244. Sample of Strawberry Pop manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21670, U-245. Sample of Black Pop manufactured by Abram Epstein, Detroit. Contains saccharin.

No. 21671, U-246. Sample of Iron Port manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21672, U-247. Sample of Black Pop manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21673, U-248. Sample of Lemon Pop manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21674, U-249. Sample of Root Beer manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21675, U-250. Sample of Raspberry Pop manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21676, U-251. Sample of Cream Soda manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21677, U-252. Sample of Ginger Ale manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21678, U-253. Sample of Strawberry Pop manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21679, U-254. Sample of Orange Pop manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21680, U-255. Sample of Orange Phosphate manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21681, U-256. Sample of Wild Cherry manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21682, U-257. Sample of Lemon Sour manufactured by Ferguson Bros., Detroit. Contains saccharin.

No. 21683, S-384. Sample of Ginger Ale manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21684, S-385. Sample of Strawberry Soda manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21685, S-386. Sample of Lemon Soda manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21686, S-387. Sample of Cola Koke manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21687, S-388. Sample of Cherry Cheer manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21688, S-389. Sample of Sarsaparilla Soda manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21689, S-390. Sample of Root Beer manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21690, S-391. Sample of Cream Soda manufactured by John J. Oliver, Pontiac. Contains saccharin.

No. 21695, K-102. Sample of Root Beer manufactured by G. A. Williston & Son, Bay City. Contains saccharin.

No. 21696, K-103. Sample of Wild Cherry Phosphate manufactured by G. A. Williston & Son, Bay City. Contains saccharin.

No. 21699, K-106. Sample of Birch Beer manufactured by G. A. Wiliston & Son, Bay City. Contains saccharin.

No. 21700, K-107. Sample of Lemon Sour manufactured by G. A. Wiliston & Son, Bay City. Contains saccharin.

No. 21701, K-108. Sample of Cream Soda manufactured by G. A. Wiliston & Son, Bay City. Contains saccharin.

No. 21702, K-109. Sample of Raspberry manufactured by G. A. Wiliston & Son, Bay City. Contains saccharin.

No. 21703, K-110. Sample of Orcherade manufactured by G. A. Wiliston & Son, Bay City. Contains saccharin.

No. 21708, V-229. Sample of Jersey Creme manufactured by Muskegon Brewing Co., Muskegon. Contains saccharin.

No. 21733, V-240. Sample of Sherbet manufactured by G. Van Den Berg, Grand Haven. Contains saccharin.

No. 21741, F-139. Sample of Lemon Soda manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21742, F-140. Sample of Ginger Ale manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21743, F-141. Sample of Root Beer manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21744, F-142. Sample of Sarsaparilla manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21745, F-143. Sample of Strawberry manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21746, F-144. Sample of Cream Soda manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21747, F-145. Sample of Concord Grape manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21748, F-146. Sample of Lemon Sour manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21749, F-147. Sample of Atlas Brew manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21750, F-148. Sample of Birch Beer manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21751, F-149. Sample of Raspberry Wine manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21752, F-150. Sample of Cremo Ginger manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21753, F-151. Sample of Bittermead manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21754, F-152. Sample of Orange Ade manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21755, F-153. Sample of Orange Cider manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21756, F-154. Sample of Atlas Ginger Ale manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21757, F-155. Sample of Cherry Phosphate manufactured by Pomeroy Bottling Works, Manistee. Contains saccharin.

No. 21760, F-158. Sample of Sarsaparilla manufactured by Paul Pomeroy, Ludington. Contains saccharin.

No. 21761, F-159. Sample of Strawberry manufactured by Paul Pomeroy, Ludington. Contains saccharin.

No. 21764, F-162. Sample of Root Beer manufactured by Paul Pomeroy, Ludington. Contains saccharin.

- No. 21766, V-249. Sample of Cherry Cider manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21767, V-250. Sample of Orange Cider manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21768, V-251. Sample of Birch Beer manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21769, V-252. Sample of Lemon Sour manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21770, V-253. Sample of Ginger Ale manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21771, V-254. Sample of Grapemist manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21772, V-255. Sample of Champagne Cider manufactured by J. W. Armbruster, Hastings. Contains saccharin.
- No. 21788, I-1383. Sample of Strawberry manufactured by E. W. Wiard, Ypsilanti. Contains saccharin.
- No. 21789, I-1384. Sample of Cherry Cheer manufactured by E. W. Wiard, Ypsilanti. Contains saccharin.
- No. 21790, I-1385. Sample of Cream Soda manufactured by E. W. Wiard, Ypsilanti. Contains saccharin.
- No. 21791, I-1386. Sample of Sarsaparilla manufactured by E. W. Wiard, Ypsilanti. Contains saccharin.
- No. 21792, I-1387. Sample of Lemon Sour manufactured by E. W. Wiard, Ypsilanti. Contains saccharin.
- No. 21803, A-33. Sample of Cream Soda manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21804, A-34. Sample of Lemon Sour manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21805, A-35. Sample of Cuban Ade manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21806, A-36. Sample of Strawberry Pop manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21807, A-37. Sample of Lemon Pop manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21808, A-38. Sample of Iron Port manufactured by John Scheu, Detroit. Contains saccharin.
- No. 21809, A-39. Sample of Ginger Ale manufactured by A. Frohlich & Son, Detroit. Contains saccharin.
- No. 21810, A-40. Sample of Lemon Sour manufactured by A. Frohlich & Son, Detroit. Contains saccharin.
- No. 21811, A-41. Sample of Sarsaparilla Pop manufactured by A. Frohlich & Son, Detroit. Contains saccharin.
- No. 21812, A-42. Sample of Lemon Pop manufactured by A. Frohlich & Son, Detroit. Contains saccharin.
- No. 21813, A-43. Sample of Cherry Cheer manufactured by A. Frohlich & Son, Detroit. Contains saccharin.
- No. 21815, A-45. Sample of Raspberry manufactured by Dyament Pop Mfg. Co., Detroit. Contains saccharin.
- No. 21816, A-46. Sample of Ginger Ale manufactured by Dyament Pop Mfg. Co., Detroit. Contains saccharin.
- No. 21817, A-47. Sample of Lemon Pop manufactured by Dyament Pop Mfg. Co., Detroit. Contains saccharin.

- No. 21817, A-49. Sample of Ginger Ale manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21821, A-51. Sample of Orange Cider manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21822, A-52. Sample of Root Beer manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21823, A-53. Sample of Kolo Cream manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21824, A-54. Sample of Lemon Sour manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21825, A-55. Sample of Strawberry Pop manufactured by A. R. Andrews, Detroit. Contains saccharin.
- No. 21826, A-56. Sample of Cream Soda manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21827, A-57. Sample of Ginger Ale manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21828, A-58. Sample of Root Beer manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21829, A-59. Sample of Wild Cherry manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21830, A-60. Sample of Lemon Sour manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21831, A-61. Sample of Black Pop manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21832, A-62. Sample of Lemon Pop manufactured by D. C. Funke, Detroit. Contains saccharin.
- No. 21833, A-63. Sample of Cherry manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21834, A-64. Sample of Raspberry manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21835, A-65. Sample of Orange manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21836, A-66. Sample of Chocolate Cream manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21837, A-67. Sample of Strawberry manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21838, A-68. Sample of Cream Soda manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21839, A-69. Sample of Sarsaparilla manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21840, A-70. Sample of Lemon Sour manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21841, A-71. Sample of Ginger Ale manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21841, A-72. Sample of Cream Soda manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21843, A-73. Sample of Black Pop manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21844, A-74. Sample of Strawberry Pop manufactured by Star Bottling Works, Wyandotte. Contains saccharin.
- No. 21845, A-75. Sample of Colo Creme manufactured by Star Bottling Works, Wyandotte. Contains saccharin.

No. 21846, A-76. Sample of Cream Soda manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21847, A-77. Sample of Cherry Phosphate manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21848, A-78. Sample of Chocolate Soda manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21849, A-79. Sample of Raspberry Phosphate manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21850, A-80. Sample of Ginger Ale manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21851, A-81. Sample of Sarsaparilla Soda manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21852, A-82. Sample of Birch Beer manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21853, A-83. Sample of Sarsaparilla Pop manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21854, A-84. Sample of Lemon Pop manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21855, A-85. Sample of Strawberry Pop manufactured by C. F. Shultz, Wyandotte. Contains saccharin.

No. 21863, I-1343. Sample of Orcherade manufactured by Eberle Brewing Co., Jackson. Contains saccharin.

No. 21869, I-1349. Sample of Ginger Ale manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21870, I-1350. Sample of Birch Beer manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21871, I-1351. Sample of Lemon Sour manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21872, I-1352. Sample of Cherry Cheer manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21873, I-1353. Sample of Root Beer manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21874, I-1354. Sample of Cream Soda manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21875, I-1355. Sample of Strawberry Pop manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21877, I-1357. Sample of Orange Soda manufactured by Stephen Kenk, Jackson. Contains saccharin.

No. 21883, I-1397. Sample of Lemon Sour manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21884, I-1398. Sample of Birch Beer manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21885, I-1399. Sample of Ginger Ale manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21886, I-1400. Sample of Allen's Red Tame Cherry manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21887, I-1401. Sample of Strawberry Pop manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21888, I-1402. Sample of Cream Soda manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21929, I-1396. Sample of Blood Orange Pop manufactured by McBride & Hawkins, Adrian. Contains saccharin.

No. 21930, I-1403. Sample of Ginger Ale manufactured by A. H. Lane, Hudson. Contains saccharin.

No. 21945, I-1414. Sample of Strawberry manufactured by Robert Foote, Hillsdale. Contains saccharin.

No. 21947, I-1416. Sample of Ginger Ale manufactured by Robert Foote, Hillsdale. Contains saccharin.

No. 21948, I-1417. Sample of Birch Beer manufactured by Robert Foote, Hillsdale. Contains saccharin.

No. 21949, I-1418. Sample of Cream Soda manufactured by Robert Foote, Hillsdale. Contains saccharin.

No. 21950, I-1419. Sample of Root Beer manufactured by Robert Foote, Hillsdale. Contains saccharin.

No. 21953, G-331. Sample of Orange manufactured by Copper City Bottling Works, Laurium. Contains saccharin.

No. 21954, G-332. Sample of Jersey Creme manufactured by Copper City Bottling Works, Laurium. Contains saccharin.

No. 21955, G-333. Sample of Ginger Ale manufactured by Copper City Bottling Works, Laurium. Contains saccharin.

No. 21956, G-334. Sample of a soft drink manufactured by the Copper City Bottling Works, Laurium. Contains saccharin.

No. 21958, G-336. Sample of White Pop manufactured by the Copper City Bottling Works, Laurium. Contains saccharin.

No. 21959, G-337. Sample of Sarsaparilla manufactured by Copper City Bottling Works, Laurium. Contains saccharin.

No. 21960, G-338. Sample of Cream Soda manufactured by Copper City Bottling Works, Laurium. Contains saccharin.

No. 21965, G-343. Sample of Sarsaparilla manufactured by R. T. Harvey, Laurium. Contains saccharin.

No. 21966, G-344. Sample of Lemon Soda manufactured by R. T. Harvey, Laurium. Contains saccharin.

No. 21967, G-345. Sample of Solo Ginger Ale manufactured by R. T. Harvey, Laurium. Contains saccharin.

No. 21968, G-346. Sample of Imitation Strawberry manufactured by R. T. Harvey, Laurium. Contains saccharin.

No. 21969, G-347. Sample of Harvey Brew manufactured by R. T. Harvey, Laurium. Contains saccharin.

No. 21975, G-353. Sample of Jersey Creme manufactured by Keweenaw Bottling Works, Mohawk. Contains saccharin.

No. 21987, G-363. Sample of Royal Brew manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21988, G-364. Sample of Ginger Ale manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21989, G-365. Sample of Lemon Soda manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21990, G-366. Sample of Orange Cider manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21991, G-367. Sample of Cream Soda manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21992, G-368. Sample of Cremo manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21993, G-369. Sample of Iron Brew manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21997, G-373. Sample of Pear Cider manufactured by Henry Larson, Hancock. Contains saccharin.

No. 21998, G-374. Sample of Root Beer manufactured by Henry Larson, Hancock. Contains saccharin.

No. 22019, I-1379. Sample of Strawberry manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22020, I-1422. Sample of Birch Beer manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22021, I-1423. Sample of Lemon Sour manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22023, I-1425. Sample of Cherry Cheer manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22024, I-1426. Sample of Sarsaparilla manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22025, I-1427. Sample of Iron Brew manufactured by J. D. Ellenberger, Sturgis. Contains saccharin.

No. 22042, G-398. Sample of Atlas Brew manufactured by Mountain Valley Water Co., Lake Linden. Contains saccharin.

No. 22060, G-438. Sample of Ginger Ale manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22061, G-439. Sample of Root Beer manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22062, G-440. Sample of Orange Cider manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22063, G-441. Sample of Pear Cider manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22064, G-442. Sample of Jersey Creme Soda manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22065, G-443. Sample of Iron Brew manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22066, G-444. Sample of Cream Soda manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 22067, G-445. Sample of Lemon Soda manufactured by South Range Bottling Works, South Range. Contains saccharin.

No. 23002, G-436. Sample of Jersey Creme manufactured by J. A. Cochran, Houghton. Contains saccharin.

No. 23086, G-447. Sample of Cremo manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23087, G-448. Sample of Sarsaparilla manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23088, G-449. Sample of Strawberry manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23089, G-450. Sample of Atlas Brew manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23090, G-451. Sample of Cream Soda manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23091, G-452. Sample of Root Beer manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23092, G-453. Sample of Lemon Soda manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23093, G-454. Sample of Pear Cider manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23094, G-455. Sample of Ginger Ale manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23095, G-456. Sample of Orange Soda manufactured by Union Bottling Works, Ironwood. Contains saccharin.

No. 23192, S-431. Sample of Jersey Creme manufactured by John Stafford, Saginaw. Contains saccharin.

No. 24252, K-149. Sample of Iron Port manufactured and sold by John Scheu, 1659 Concord St., Detroit. Product contains saccharin.

No. 24253, K-150. Sample of Cream Soda manufactured by John Scheu, 1659 Concord St., Detroit. Product contains saccharin.

No. 24255, K-152. Sample of Lemon Soda manufactured by John Scheu, Detroit. Product contains saccharin.

No. 24580, G-621. Sample of White Pop manufactured by Wendell & Luoma, Hancock. Saccharin present.

No. 24581, G-622. Sample of Red Pop manufactured by Wendell & Luoma, Hancock. Saccharin present.

No. 24582, G-623. Sample of Soft Drink manufactured by Wendell & Luoma, Hancock. Saccharin present.

SUGAR.

No. 20871, I-1273. Sample of Cane and Maple Sugar handled by John A. Tolman, Chicago, Ill. Label does not state percentage of ingredients other than maple. Not properly labeled.

SUGAR BUTTER.

No. 23069, I-1437. Sample of Sugar Butter, manufactured by the Kellogg Mfg. Co., Keokuk, Iowa. Misbranded.

No. 23552, V-291. Sample of Sugar Butter manufactured by the Kellogg Mfg. Co., Keokuk, Iowa, and procured from Colegrove Bros., Remus. Misbranded.

SWEETENING POWDER.

No. 20587, Y-38. Sample of Sweetening Powder manufactured by the Hyden Chemical Works, Garfield, N. J. Contains saccharin.

SYRUPS.

No. 20714, S-190. Sample of Old Tavern Corn Syrup handled by Berdan & Co., Toledo, Ohio, and found with J. F. Knapp & Son, Eaton Rapids. Not properly labeled.

No. 20859, I-1269. Sample of Sorghum & Corn Syrup (Red Ribbon brand) handled by W. M. Hoyt Co., Chicago, and found with C. B. Treat, Buchanan. Not properly labeled.

No. 20860, I-1271. Sample of Blossom brand Cane and Maple Syrup manufactured by McNeil & Higgins Co., Chicago, and found with Asa Danfirth, St. Joseph. Label does not show percentage of ingredients other than maple contained in the product. Not properly labeled.

No. 20866, G-213. Sample of Cane and Maple Syrup manufactured by W. M. Hoyt Co., Chicago, and found with Watson & Palmer, Marquette.

Label does not give percentage of ingredients other than maple contained in the product. Not properly labeled.

No. 21271, X-294. Sample of Red Karo Corn Syrup manufactured by the Corn Products Co., Chicago, handled by Northrup, Robertson & Carrier Co., Lansing, and found with the Milne Grocery Co., Lansing. Not properly labeled.

No. 21214, X-265. Sample of Karo, Extra Quality Corn Syrup manufactured by the Corn Products Co., Chicago, handled by Northrup, Robertson & Carrier Co., Lansing. Not properly labeled.

No. 21292, G-277. Sample of "Karo Extra Quality" manufactured by Corn Products Refining Co., Chicago, handled by Sprague, Warner Co., Chicago, and found with M. Levy & Co., Iron Mountain. Not properly labeled.

No. 21558, G-279. Sample of White Heather Syrup distributed by Reid, Murdock & Co., Chicago, and found with the John Tuft Co., Crystal Falls. Not properly labeled.

No. 23018, K-116. Sample of Corn and Cane Syrup manufactured by the Maple Products Co., Chicago, handled by Chas. A. Mann, Detroit. Not properly labeled.

No. 23071, I-1440. Sample of Melise Syrup manufactured by Maple Products Co., Chicago, found with M. Hale & Co., South Haven. Not properly labeled.

No. 23297, K-123. Sample of Indian Brand Corn Syrup manufactured by W. A. Soule, Detroit. Formula not in proper sized type. Misbranded.

No. 23298, S-435. Sample of Pineapple Syrup manufactured by the Crown Cordial & Extract Co., New York. Contains formic acid not stated on the label.

No. 23299, S-436. Sample of Strawberry Syrup manufactured by the Crown Cordial & Extract Co., New York. Contains formic acid not stated on the label.

No. 23352, Y-79. Sample of Strawberry Fountain Syrup manufactured by the Fruit Belt Syrup Co., South Haven, and procured from J. Hoffman, Grand Rapids. Contains salicylic acid or salts thereof, a preservative not permissible in food products.

No. 23353, Y-80. Sample of Don't Care Fountain Syrup manufactured by the Fruit Belt Syrup Co., South Haven, and procured from J. Hoffman, Grand Rapids. Contains salicylic acid or salts thereof, a preservative not permissible in food products.

No. 23640, Y-89. Sample of Blackberry Fountain Syrup manufactured by Folger, Grand Rapids. Contains salicylic acid or salts thereof, a preservative not permissible in food products.

No. 23869, I-1550. Sample of My Wife's Maple & Cane Syrup manufactured by Fred Fear, 15 Jay St., New York, handled by the R. A. Bartley Co., Toledo, Ohio, and found with Mrs. B. Fischer, Milan. Misbranded.

No. 23424, S-453. Sample of Strawberry Syrup manufactured by the Crown Cordial & Extract Co., New York. Product contains added formic acid not stated on the label.

No. 23425, S-454. Sample of Pineapple Syrup manufactured by the

Crown Cordial & Extract Co., New York. Product contains added formic acid not stated on the label.

No. 23929, I-1553. Sample of Morning Glory Fancy Table Syrup manufactured by Berry-Maybrun Co., Chicago, and found with Anton Brahm, Ann Arbor. Misbranded.

TURPENTINE.

No. 19357. Unofficial. Sample of Turpentine. Contains about 20% of a mineral oil.

No. 20091, Q-7. Sample of Turpentine handled by L. Perrigo & Co., Allegan. Sample contains about 30% of a petroleum product.

VINEGAR.

No. 19248, V-86. Sample of Vinegar sold by Cook Mercantile Co., Grand Haven. Below standard in acidity.

No. 19386. Unofficial. Sample of Sugar Vinegar. Sample is below the legal standard in total solids and ash for fermented vinegar made from fruit and grain.

No. 19387. Unofficial. Sample of Sugar Vinegar. Sample is below the legal standard in total solids and ash for fermented vinegar made from fruit and grain.

No. 20195, G-51. Sample of Vinegar handled by Roach & Seeber Co., Houghton. Below standard in acid strength.

No. 20196, G-52. Sample of Wine Vinegar manufactured by Raffaello Roli, South Range, Mich. Below standard in acid strength.

No. 20233. Unofficial. Sample of Cider Vinegar. Below standard in acid strength.

No. 20234, G-43. Sample of White Wine Distilled Vinegar handled by Roach & Seeber Co., Houghton. Below standard in acid strength.

No. 20712, I-1257. Sample of Apple Cider Vinegar sold by B. Oppenheim, Eau Claire. Below standard in acid strength.

No. 20713, S-189. Sample of Vinegar (Saratoga Brand) sold by Sterling & Crawford, Eaton Rapids. Below standard in acid strength.

No. 20717, G-172. Sample of White Wine Vinegar handled by Roach & Seeber Co., Houghton. Below standard in acid strength.

No. 20810, K-83. Sample of Cider Vinegar manufactured by Chas. Uelsmann, Detroit. Below standard in solids and ash. Not a pure cider vinegar.

No. 21172. Unofficial. Sample of Vinegar. Below standard in acid strength.

No. 21725, G-206. Sample of Saratoga Brand Vinegar, handled by the National Grocer Co., Escanaba. Below standard in acid strength.

No. 21978. Unofficial. Sample of Vinegar. Below standard in total solids and ash.

No. 23033, G-446. Sample of Vinegar manufactured by the Oakland Vinegar & Pickle Co., Saginaw, handled by J. B. Matthews & Co., Ashland, Wis., and procured from L. H. Truettner Co., Bessemer. Below standard in acidity, total solids and ash content. Not a pure cider vinegar but a mixture of dilute acetic acid or distilled vinegar and foreign material. Contains caramel.

No. 23034, H-447. Sample of White Wine Vinegar procured from L. H. Truettner Co., Bessemer. Below standard in acid strength.

No. 23486, S-460. Sample of "Cider Vinegar" manufactured for Church & McConnell Co., Toledo, and procured from Floyd W. Downing, Byron. Not a pure cider vinegar, but a mixture consisting wholly or in part of a dilute acetic acid or distilled vinegar and foreign substance high in reducing sugar and artificially colored in imitation of genuine cider vinegar.

No. 23499, S-641. Sample of "Apple Cider Vinegar" manufactured by the Gordon Vinegar Co., Pontiac, and found with Lee and Cady, Saginaw. Not a genuine cider vinegar but a mixture of dilute acetic or distilled vinegar and cider vinegar. Below standard in solids.

No. 23540, S-463. Sample of Vinegar manufactured by F. K. Taylor, Denver, Col., and procured from John C. Calkins, Owosso. Below standard in acidity and total solids. Not a pure cider vinegar.

No. 23858, S-529. Sample of Cider Vinegar manufactured by E. T. Bush, Plainfield, Mich., and procured from A. W. Brown Co., Stockbridge. Sample is below standard in acid strength.

No. 23930, V-303. Sample of "Cider Vinegar" manufactured by the Parish Cider & Vinegar Co., Grand Rapids. Not a pure cider vinegar, foreign material high in reducing sugar has been substituted wholly or in part for genuine cider vinegar.

No. 24011, S-543. Sample of Dixie Vinegar manufactured by the Dixie Sugar Vinegar Co., Chicago, and procured from P. E. Kirkham, Vernon. Below standard in acidity.

No. 23753, S-519. Sample of Compound Vinegar manufactured by the Michigan Sugar Co., Saginaw, and procured from Lee and Cady, Saginaw. Product consists mainly of distilled vinegar colored.

No. 24011, S-543. Sample of Dixie Vinegar manufactured by the Dixie Sugar Vinegar Co., Chicago, Ill., and procured from P. E. Kirkham, Vernon. Below standard in acidity.

No. 24351, K-154. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from the Edward Henkel Co., Detroit. Sample contains material foreign to cider vinegar. Not a pure cider vinegar.

No. 24352, K-155. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from the store of Grones & Brehmer, Detroit. Below standard in total solids. Sample contains added foreign material high in reducing sugars.

No. 24353, K-156. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from Roehrig and Foerster, Detroit. Sample consists of a mixture of dilute acetic acid or distilled vinegar, and foreign material high in reducing sugars, in imitation of genuine cider vinegar.

No. 24354, K-157. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from the Dueweke Grocery Co., Detroit. Below standard in total solids. Sample contains foreign material high in reducing sugars.

No. 24355, K-158. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from Lee & Cady, Detroit. Sample consists wholly or in part of a mixture of dilute acetic acid, or distilled vinegar, and foreign material high in

reducing sugars, in imitation of genuine cider vinegar. Below standard in ash and total solids.

No. 24356, K-159. Sample of "Pure Fermented Cider Vinegar" manufactured by the Chas. Uelsmann Co., Ltd., Detroit, and procured from N. Wolfelder & Co., Detroit. Below standard in ash. Sample consists wholly or in part of a mixture of dilute acetic acid, or distilled vinegar, and foreign material high in reducing sugars, in imitation of genuine cider vinegar.

MISCELLANEOUS.

No. 19330, G-28. Sample of "Sugar Compote" manufactured by the Bay State Maple Syrup Co., Boston, Mass., and handled by Roach & Seeber Co., Calumet. Label does not bear the percentage of ingredients other than maple contained in the product.

CANDY—MISCELLANEOUS.

Labor'y No.	Seal No.	Kind of Candy.	Moisture.	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
21144	S-323	Burnt Peanuts.....	1.323	.381	.....	None.....	None.
21145	S-324	Johnie Smokers.....	1.324	.100	.....	None.....	None.
21147	S-326	Chocolate Teddy Bears.....	1.203	.392	.....	None.....	None.
21148	S-327	King Korkers (Candy).....	1.606	.394	.....	None.....	None.
21149	S-328	Sweet Capered Candy.....	1.983	.163	.....	None.....	None.
21150	S-329	Jaw Breakers.....	.983	.100	.....	Coal Tar.....	None.
20827	G-180	Smooth Almond Candy.....	.667	.235	.73	None.....	None.
20829	G-182	Plain Cream Candy.....	3.42	.0776	.09.2	None.....	None.
20831	G-184	Peanut Butter Chips.....	2.809	.65	.59.9	None.....	None.
20834	G-187	Butter Cups.....	4.396	.310	.67.1	None.....	None.
20836	G-189	Molasses Chips.....	2.558	.644	.56.69	None.....	None.
20839	G-192	Molasses Taffy.....	1.84	.26	.59	None.....	None.
20842	G-195	Butter Scotch.....	.516	.178	.58.3	None.....	None.
20843	G-196	Candy.....	4.468	.28	.53	None.....	None.
20845	G-198	Molasses Candy.....	3.68	.621	.52.3	None.....	None.
20848	G-201	Nuggets Candy.....	5.149	.18	.36	None.....	None.
20849	G-202	Marshmallows.....	14.7	.17	.34.4	None.....	None.
20852	G-205	Candy Cherries.....	14.546	.25	14.1	Coal Tar.....	None.
20854	G-211	Candy Japanese Mixture.....	3.56	.21	.68.7	None.....	None.
20855	G-212	Candy Kindergarten Mixed.....	12.37	.05	.70.9	None.....	None.
20979	G-214	Fruit Cordials.....	5.93	.766	.....	Vegetable.....	None.
20980	G-215	Candy Town Talk.....	3.7	.08	.....	None.....	None.
20984	G-219	Bonita Cherries.....	18.415	.523	.....	None.....	None.
20985	G-220	Lime Fruit.....	.914	.16	.....	Coal Tar.....	None.
20987	G-222	Hobson Kisses.....	2.336	.14	.....	Coal Tar.....	None.
20988	G-223	Competition Mixed.....	2.94	.15	.....	Coal Tar.....	None.
20991	G-226	Marshmallows.....	5.923	.642	.....	None.....	None.
20996	G-231	Nuggets.....	5.836	.464	.....	None.....	None.
20998	G-233	Molasses Chips.....	11.51	.282	.....	None.....	None.
21000	G-235	Raspberry Jelly.....	8.41	.29	.....	Coal Tar.....	None.
21001	G-236	Maraschino Cherries.....	3.431	.079	.....	None.....	None.
21037	G-237	Cream Candy.....	2.40	.1	.....	None.....	None.
21040	G-240	Picnic Lunch.....	2.66	.39	.....	None.....	None.
21042	G-242	Jumbo Stick.....	1.277	.123	.....	None.....	None.
21043	G-243	Double Headed Sucker.....	3.02	.04	.....	None.....	None.
21045	G-245	Jelly Spice Drops.....	2.42	.26	.....	None.....	None.
21046	G-246	Lemon Drops.....	3.88	.43	.....	Coal Tar.....	None.
21048	G-248	Nuggets.....	2.12	.39	.....	None.....	None.
21049	G-249	Bon Bon Creams.....	3.02	.04	.....	None.....	None.
21284	F-63	Candy (Cocoanut Fudge).....	2.459	.345	.....	None.....	None.
21285	F-64	Candy (Chocolates).....	5.213	.7	.....	None.....	None.
21286	F-65	Cream Candy.....	4.263	.544	.....	None.....	None.
21287	F-66	Taffey Candy.....	2.678	.811	.....	None.....	None.
21289	F-68	Taffey Candy.....	3.043	.163	.....	None.....	None.
21919	F-165	Butter Scotch.....	1.723	.245	.....	None.....	None.
21920	F-166	Cream Wafers.....	2.516	.103	.....	None.....	None.
21921	F-167	Taffey Candy.....	3.174	.321	.....	None.....	None.
21922	F-168	Vanilla Taffey.....	3.174	.321	.....	None.....	None.
21923	F-169	Almond Honey Caramels.....	2.642	.511	.....	None.....	None.
21925	F-171	Cream Caramel.....	3.912	.45	.....	None.....	None.
21927	F-173	Molasses Taffey.....	2.800	.23	.....	None.....	None.
21928	F-174	Horehound Candy.....	1.137	.115	.....	None.....	None.
21031	A-14	Mixed Candies.....	6.93	.618	.....	Coal tar dye.....	None.
21032	A-15	Mixed Candy.....	8.58	.35	.....	Coal tar dye.....	None.
21033	A-16	Big Gum Drops.....	2.719	.061	.....	None.....	None.
21034	A-17	Mixed Candies.....	13.35	.344	.....	Coal tar dye.....	None.
21035	A-18	Original Turkish Delight.....	9.415	.289	.....	None.....	None.
21036	A-19	Mixed Candies.....	8.06	.54	Coal tar dye.....	None.

DAIRY AND FOOD COMMISSION.

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CANDY—MISCELLANEOUS.

Labor'y No.	Seal No.	Kind of Candy.	Moisture.	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
20939	V-123	Duchess Chocolates.....	7.355	.451	55.38	None.....	None.
20940	V-124	Favorite Candy.....	8.070	.48	50.76	None.....	None.
20942	V-126	Medium Pet.....	6.35	.385	56.92	None.....	None.
20943	V-127	Cherry Candy.....	6.135	.765	53.84	Coal Tar.....	None.
20944	V-128	Flora Assorted Chocolates.....	4.895	.60	64.61	None.....	None.
20945	V-129	Gladys Candy.....	4.714	.....	61.53	None.....	None.
20876	S-198	Candy Narnips.....	5.426	.858	50	None.....	None.
20880	S-202	Candy Pecan Taps.....	6.61	.65	42.9	None.....	None.
20881	S-203	Chocolate Maplene.....	15.144	.494	51.08	None.....	None.
20882	S-204	Candy Licorice.....	9.39	2.37	11	None.....	None.
20884	S-206	Candy Daisies.....	6.946	.7132	30.6	None.....	None.
20885	S-207	Candy Assorted Creams.....	7.85	.12	72.3	None.....	None.
20887	S-209	Candy Marshmallows.....	11.317	.219	52.3	None.....	None.
20888	S-210	Butter Scotch.....	15.461	.368	9.23	None.....	None.
20889	S-211	Peppermint Creams.....	11.15	.1926	63.7	None.....	None.
20890	S-212	Candy Persian Blocks.....	12.066	.535	12.3	None.....	None.
20891	S-213	Candy Assorted Gums.....	7.1	.277	21.84	None.....	None.
20892	S-214	Peppermint Lozenges.....	2.79	.063	37.69	None.....	None.
20893	S-215	Jelly Beans.....	6.042	.165	48.61	None.....	None.
20894	S-216	Candy Assorted Straws.....	4.9	.215	43.07	None.....	None.
20895	S-217	Candy Kisses.....	6.867	.638	31.61	None.....	None.
20896	S-218	Cocoanut Balls.....	7.81	.254	30.76	None.....	None.
20897	S-219	Candy Jelly Gums.....	10.65	.236	21.53	None.....	None.
20898	S-220	Candy Fudge.....	5.2	.54	52.3	None.....	None.
20899	S-221	Candy Herald Square.....	9.45	.402	27.64	None.....	None.
20903	S-223	Cream Bon Bons.....	8.328	.06	72.61	None.....	None.
20904	S-224	Candy Mixed Gums.....	5.928	.423	11.38	None.....	None.
20905	S-225	Caramels.....	10.46	.182	12.3	None.....	None.
20948	S-226	Tulip Marshmallows.....	8.685	.725	40.0	None.....	None.
20950	S-228	Marshmallows.....	18.146	.354	50	None.....	None.
20951	S-229	Toasted Marshmallows.....	15.226	.42	.....	None.....	None.
20952	S-230	Marble Fudge.....	7.3	.52	50.77	None.....	None.
20953	S-231	Jelly Marmalade.....	8.9	.10	53.85	None.....	None.
20954	S-232	Candy Assorted Caramels.....	7.356	7.758	23.00	None.....	None.
20955	S-233	Candy Wintergreen Berries.....	11.51	.282	70.76	Coal Tar.....	None.
20956	S-234	Candy Kisses.....	11.68	.85	9.23	None.....	None.
20958	S-236	Jelly Beans.....	5.862	.158	46.15	None.....	None.
20959	S-237	Cream Mints.....	2.4	.10	80.76	None.....	None.
20960	S-238	Candy Sultana Mixture.....	2.106	.101	.....	None.....	None.
20961	S-239	Candy Butter Walnut.....	3.23	1.36	60	None.....	None.
20963	S-241	Candy Hamburgs.....	2.157	.217	.....	None.....	None.
20965	S-243	Imitation Burnt Almonds.....	1.988	.131	.....	None.....	None.
20968	S-246	Candy Mixture.....	3.031	.12	.....	Coal Tar.....	None.
20972	S-250	Salt Water Kisses.....	1.934	.25	.....	None.....	None.
20973	S-251	French Bon Bons Artificial.....	1.268	.147	.....	None.....	None.
20977	S-255	Mixed Fruit Tablets.....	1.015	.065	.....	Vegetable.....	None.
21002	S-257	Candy Kisses.....	2.399	.2	.....	None.....	None.
21003	S-258	Gum Drops.....	3.563	.112	.....	None.....	None.
21004	S-259	Cream Caramels.....	2.085	.252	.....	None.....	None.
21005	S-260	Stick Candy.....	1.398	.112	.....	None.....	None.
21007	S-262	Candy.....	1.455	.082	.....	None.....	None.
21008	S-263	Summer Sour Drops.....	1.700	.115	.....	None.....	None.
21009	S-264	Cinnamon Kisses.....	1.406	.144	.....	None.....	None.
21010	S-265	Cream Wafers.....	1.557	.093	.....	None.....	None.
21011	S-266	Candy.....	1.947	.1	.....	None.....	None.
21012	S-267	Candy.....	1.863	.163	.....	None.....	None.
21120	S-308	Raspberry & Pineapple Tart.....	1.479	.210	.....	Coal Tar.....	None.
21133	S-312	Darling Cream Candy.....	2.117	.03	.....	None.....	None.
21137	S-316	Glad Hand Candy.....	1.383	.118	.....	Coal Tar.....	None.
21138	S-317	Sunshine Candy.....	1.128	.216	.....	None.....	None.

CANDY—MISCELLANEOUS.

Labor'y No.	Seal No.	Kind of Candy.	Moisture.	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
21052	G-252	Butter Scotch	2.26	.16		None	None.
21055	G-255	Strawberry & Cream	2.89	.4		None	None.
21245	G-263	Molasses Kisses	3.29	.96		None	None.
21247	G-265	Nuggets	3.03	.41		None	None.
21248	G-266	White Taffy	3.96	.11		None	None.
21249	G-267	Molasses Taffy	3.78	.76		None	None.
21251	G-269	Kisses	5.08	.35		None	None.
21255	G-273	Nuggets	2.55	.308		None	None.
21562	G-283	Lemon Drops	6.03	.20		Coal Tar	None.
21564	G-285	Vanilla Taffy	5.35	.26		None	None.
21565	G-286	Hore Hound Drops	1.21	.23		None	None.
21566	G-287	Vanilla Fudge	5.03	.43		None	None.
21720	G-301	Strawberry Taffy	5.2	.22		None	None.
21721	G-302	Cream Taffy	6.652	.366		None	None.
21722	G-303	Hore hound	.56	.252		None	None.
21723	G-304	Butter Scotch	1.827	.066		None	None.
21889	G-312	Fudge	3.209	.123		None	None.
21890	G-313	Taffy	5.043	.123		None	None.
21893	G-316	Horehound Candy	1.187	.117		None	None.
21894	G-317	Butter Scots	2.197	.154		None	None.
21895	G-318	Cream Taffy	3.44	.209		None	None.
21898	G-321	French Nuggett	3.425	.321		None	None.
21899	G-322	Nuggett	2.234	.234		None	None.
21961	G-339	Nuggets	1.001	.147		None	None.
21962	G-340	Mixed Candy	1.691	.199		None	None.
21964	G-342	Taffy	2.415	.213		None	None.
22011	G-355	Butter Scotch	2.67	.123		None	None.
22012	G-356	White Taffy	2.15	.24		None	None.
22013	G-357	Nuggett	3.75	.24		None	None.
22015	G-359	Butter Carmels	5.94	.5		None	None.
22016	G-360	Fudge	1.7	.9		None	None.
22018	G-362	Candy	2.95	.35		None	None.
22031	G-387	Maple Carmels	2.75	.25		None	None.
22032	G-388	Horehound Drops	2.3	.135		None	None.
22033	G-389	Cream Wafers	5.123	.035		None	None.
22034	G-390	Chewing Candy	4.755	.325		None	None.
22035	G-391	Cream Creamery	4.1	.313		None	None.
22037	G-393	Candy	1.25	.235		None	None.
22072	G-406	White Taffy	5.2	.1		None	None.
22073	G-407	Chewing Candy	5.6	.4		None	None.
22074	G-408	White Cream Carmels	4.95	.64		None	None.
22078	G-412	Tingling	.395	.84		None	None.
22080	G-414	Cream Carmels	2.65	.96		None	None.
22081	G-415	Fudge	4.485	.315		None	None.
22082	G-416	Candy	7.0	.1		None	None.
22084	G-418	Klondyke	5.02	.18		None	None.
22085	G-419	Caramels	3.4	.98		None	None.
22086	G-420	Creams	7.318	.132		None	None.
20908	V-92	Maraschino Cherries	7.2	.677	53.84	None	None.
20909	V-93	Orinoco Candy	14.985	.594	49.84	None	None.
20910	V-94	Marguerite Candy	7.04	.9663	54.14	None	None.
20912	V-96	Pure Sugar Stick	3.878	.046	82.76	None	None.
20913	V-97	Pure Sugar Lemon Drops	9.274	.028	36.14	None	None.
20914	V-98	Lemon Drops	2.232	.286	41.76	Coal Tar	None.
20915	V-99	Assorted Stick Candy	.928	.16	44.00	None	None.
20916	V-100	Moss Squares	1.312	.16	68.3	Coal Tar	None.
20917	V-101	Everton Taffy	7.984	.648	50.76	None	None.
20918	V-102	Old Fashioned Horehound Drops	12.01		50.76	None	None.
20931	V-115	Milk Nuget	6.15	.768	40.61	None	None.
20932	V-116	Margarite Chips	2.48	1.27	46.15	None	None.
20933	V-117	Nut Wafers	1.194	.93	43.07	None	None.
20935	V-118	Whipped Cream	8.47	.4	55.38	None	None.

PEANUT CANDY.

Labor'y No.	Seal No.	Kind of Candy.	Moisture.	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
20832	G-185	Peanut Candy.....	3.908	.207	61.9	None.....	None.
20841	G-194	Peanut Candy.....	1.68	.28	28.3	None.....	None.
21126	S-305	Peanuts (French Burnt).....	1.310	.131		None.....	None.
21378	F-62	Peanut Candy.....	1.429	.234		None.....	None.
21375	F-59	Peanut Candy.....	1.429	.297		None.....	None.
22083	G-417	Peanut Rock.....	2.5	.9		None.....	None.
21724	G-305	Peanut Brittle.....	4.055	.751		None.....	None.
22079	G-413	Peanut Candy.....	1.41	.24		None.....	None.
22070	G-404	Peanut Brill.....	10.6	.6		None.....	None.
21250	G-268	Peanut Candy.....	3.356	.24		None.....	None.
21560	G-281	Peanut Taffy.....	2.713	0.865		None.....	None.
21963	G-341	Peanut Taffy.....	3.145	.312		None.....	None.
21253	G-271	Peanut Candy.....	2.131	.338		None.....	None.
21256	G-274	Peanut Candy.....	1.232	.204		None.....	None.
21254	G-272	Peanut Candy.....	2.132	.204		None.....	None.
21050	G-250	Peanut Crisp.....	.928	.16		None.....	None.
21896	G-319	Peanut Candy.....	1.091	.189		None.....	None.

COCOANUT CANDY.

Labor'y No.	Seal No.	Kind of Candy.	Moisture..	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
20886	S-208	Cocoanut Bon Bons.....	7.089	.337	12.3	None.....	None.
20900	S-222	Cocoanut Bon Bons.....	8.028	.32	44.3	None.....	None.
20957	S-235	Cocoanut Cereal Bon Bons.....	8.41	.29	61.53	None.....	None.
20971	S-249	Cocoanut Squares.....	2.743	.17		None.....	None.
20976	S-254	Cocoanut Kisses.....	.987	.215		None.....	None.
20994	G-229	Cocoanut Candy.....	2.411	.840		None.....	None.
20997	G-232	Cocoanut Caramels.....	6.32	.68		None.....	None.
20999	G-234	Cocoanut Kisses.....	11.68	.85		None.....	None.
21044	G-244	Cocoanut Brilliant.....	3.23	.58		None.....	None.
21054	G-254	Cocoanut Kisses.....	4.33	.43		None.....	None.
21561	G-282	Cocoanut Molasses.....	10.03	.97		None.....	None.
21567	G-288	Cocoanut Ice Caramels.....	3.246	.942		None.....	None.
21892	G-315	Cocoanut.....	3.415	.427		None.....	None.
21900	G-323	Cocoanut Candy.....	3.415	.427		None.....	None.
21901	G-324	Cocoanut Kisses.....	2.891	.098		None.....	None.
22017	G-361	Cocoanut Kisses.....	1.1	.98		None.....	None.
22038	G-364	Cocoanut Kisses.....	3.1	.4		None.....	None.
22039	G-395	Cocoanut Taffy.....	1.35	.585		None.....	None.

CHOCOLATE CANDY.

Labor'y No.	Seal No.	Kind of Candy.	Moisture.	Ash.	Sucrose.	Color.	Sulphites Saccharin or Arsenic.
20828	G-181	Chocolates Cream Candy	3.09	.164	56.6	None	None.
20830	G-183	Chocolate Dip Peanuts	.444	.641	50.0	None	None.
20833	G-186	Chocolate Cream Candy	4.201	.572	59.0	None	None.
20835	G-188	Chocolate Caramels	4.085	.469	49.8	None	None.
20837	G-190	Chocolate Dip Caramels	5.428	.907	52.0	None	None.
20838	G-191	Chocolate Creams	8.03	.646	60.6	None	None.
20840	G-193	Chocolate Chips	.942	.618	62.7	None	None.
20844	G-197	Chocolate Caramels	1.47	.26	52.8	None	None.
20850	G-203	Chocolate Maple Candy	4.88	.605	57.69	None	None.
20854	G-307	Chocolate, Milk	7.3	.056	56.0	None	None.
20855	G-208	Chocolate Bitter Sweets	7.25	.958	47.5	None	None.
20856	G-209	Chocolate, American Beauty	6.336	.766	46.9	None	None.
20874	S-196	Chocolate Chips	2.424	.48	45.8	None	None.
20875	S-197	Chocolate Peppermint	7.3	.74	44.7	None	None.
20877	S-199	Chocolate Strawberry	5.59	.66	55.5	None	None.
20878	S-200	Chocolate Stars	1.404	.968	58.4	None	None.
20879	S-201	Chocolate Tribus	5.3	.62	71.2	None	None.
20906	V-90	Chocolate, Milk	6.389	.5446	47.69	None	None.
20907	V-91	Chocolate, Marguerite	11.30	.7303	53.23	None	None.
20920	V-104	Chocolate Frappe	18.16	.384	55.07	None	None.
20921	V-105	Chocolates, Choate	4.999	.686	52.3	None	None.
20922	V-106	Chocolates Royal	4.573	.381	56.0	None	None.
20923	V-107	Chocolates Filburts	1.07	.673	35.67	None	None.
20924	V-108	Chocolate Walnuts	.176	.60	43.69	None	None.
20925	V-109	Chocolate, Winner	4.958	.25	55.38	None	None.
20926	V-110	Chocolate, Charite	3.34	.88	44.61	None	None.
20928	V-112	Chocolate, Large Pet	5.684	.32	55.38	None	None.
20929	V-113	Chocolate, Stella Nugget	6.48	.708	43.07	None	None.
20930	V-114	Chocolate, Swiss	7.2	.63	44.61	None	None.
20935	V-119	Chocolates, Mona	4.611	.41	56.92	None	None.
20938	V-122	Chocolates Gem Caramel	2.862	.324	53.84	None	None.
20949	S-227	Chocolate Creams	5.64	.29	52.3	None	None.
20970	S-248	Chocolate Strawberries	3.896	.298	None	None.	None.
20982	G-217	Chocolates Pinnacle	1.897	.236	None	None.	None.
20983	G-218	Chocolates Bonita Milk	4.321	.387	None	None.	None.
20986	G-221	Chocolate Old Fashioned	4.064	.525	None	None.	None.
20995	G-230	Chocolate Dates	5.263	.845	None	None.	None.
21014	S-269	Chocolate Vanilla	3.137	.363	None	None.	None.
21016	S-271	Chocolate Creams	2.185	.213	None	None.	None.
21029	A-12	Chocolates, Sterling	16.01	.8	None	None.	None.
21030	A-13	Chocolates, Rex	4.378	.286	None	None.	None.
21038	G-238	Chocolate Swiss Milk	5.17	.68	None	None.	None.
21039	G-239	Chocolate Dip Peanuts	3.23	.97	None	None.	None.
21047	G-247	Chocolate Tingling	3.039	.321	None	None.	None.
21053	G-253	Chocolates	3.05	.22	None	None.	None.
21130	S-308	Chocolates	1.39	.952	None	None.	None.
21135	S-314	Chocolate Leader	2.361	.282	None	None.	None.
21246	G-264	Chocolates	4.215	.443	None	None.	None.
21252	G-270	Chocolate Peanuts	1.432	.317	None	None.	None.
21290	F-69	Chocolate Candy	3.121	.313	None	None.	None.
21377	F-61	Chocolate Peanuts	2.461	.511	None	None.	None.
21376	F-60	Chocolate Marshmallows	5.280	.87	None	None.	None.
21563	G-284	Chocolate, Milk	3.505	.795	None	None.	None.
21568	G-289	Caramels	1.527	.979	None	None.	None.
21891	G-314	Chocolate	3.426	.461	None	None.	None.
21897	G-320	Chocolate Caramels	3.2	.8	None	None.	None.
22014	G-358	Chocolate Cream	3.4	1.0	None	None.	None.
22036	G-392	Chocolate	3.105	.83	None	None.	None.
22071	G-405	Chocolate Caramels	3.6	.84	None	None.	None.
22075	G-409	Chocolate Cream Kisses	3.015	.303	None	None.	None.
22077	G-411	Chocolate	3	.323	None	None.	None.
22087	G-421	Chocolate	1.654	.55	None	None.	None.



MILL AND STOCK ROOM.

CONCENTRATED COMMERCIAL FEEDING STUFFS.

THE LAW.

Any manufacturer, company, person or persons who shall sell, offer or expose for sale or for distribution, in this State, any concentrated commercial feeding stuffs used for feeding live stock, shall furnish with each car, or other amount shipped in bulk, and shall affix to every package of such feeding stuff, in a conspicuous place, on the outside thereof, a plainly printed statement, clearly and truly certifying the number of net pounds in the car or package sold or offered for sale, the name or trademark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis, stating the percentages it contains of crude protein, crude fibre, nitrogen-free extract and ether extract, all constituents to be determined by the methods adopted by the association of official agricultural chemists. Whenever any feeding stuff is sold at retail, in bulk or in packages belonging to the purchaser, the agent or dealer shall furnish to him a certified copy of the chemical analysis named in this section.

(a) The term concentrated commercial feeding stuffs as used in this act shall include linseed meal, cotton seed meal, pea meals, cocoanut meals, gluten meals, oil meals of all kinds, gluten feeds, maize feeds, starch feeds, mixed sugar feeds, hominy feeds, rice meals, oat feeds, corn and oat feeds, meat meals, dried blood, clover meals, mixed feeds of all kinds, slaughter house waste products also all condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended for feeding to domestic animals: Provided, That such feeding stuffs, as defined above, shall not include hays, straws, fodders, ensilage, the whole seeds nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, flax-seed, maize, buckwheat, wet brewers' grains, malt sprouts, wet or dried beet pulp, when unmixed with other materials. Neither shall it include wheat, rye and buckwheat brans or middlings not mixed with other substances, but sold separately as distinct articles of commerce, nor pure grains ground together.

(b) Before any manufacturer, company, person or persons shall sell, offer or expose for sale in this State any concentrated commercial feeding stuff, he or they shall, for each and every feeding stuff bearing a distinguishing name or trade-mark file annually, with the Dairy and Food Commissioner a certified copy of the chemical analysis and certificate referred to in this section, and shall deposit with said Dairy and Food Commissioner a sealed glass jar, or bottle, containing at least one pound of the feeding stuff to be sold or offered for sale, together with an affidavit that it is a fair sample of the article thus to be sold or offered for sale. He or they shall also pay annually into the State treasury a license fee of twenty dollars for each and every brand of feeding stuff he offers or exposes for sale in this State. Said fee is

to be paid on or before April first of each year: Provided, That whenever the manufacturer or importer shall have paid this license fee, his agents shall not be required to do so. Whenever any manufacturer, importer, agent or seller of any commercial feeding stuff desires at any time to sell such material and has not paid the license fee therefor, he shall pay the license fee prescribed in this section, before making any such sale. The money collected under the provisions of this act shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the regular appropriation therefor.

(c) Whenever the manufacturer, importer agent or seller of any commercial feeding stuff shall have complied with the requirements of this section the Dairy and Food Commissioner shall issue or cause to be issued, a license permitting the sale of such feeding stuff, which license shall terminate on April first following the date of issue.

(d) All such analyses of commercial feeding stuffs required by this act, shall be made under the direction of the Dairy and Food Commissioner, and shall be paid for out of the funds arising from the license fees provided for in this section.

(e) The Dairy and Food Commissioner shall publish, or cause to be published in bulletin form, at least annually a correct statement of all analyses made, together with any incidental information concerning same which he may deem proper.

(f) Any manufacturer, importer, company, agent, person or persons, who shall sell, offer or expose for sale, without first complying with the provisions of this act, any commercial feeding stuff, or shall attach or cause to be attached to any car, package or other quantity of said feeding stuff, an analysis stating that it contains a larger percentage of any one or more of the constituents named in this section than it really does contain shall, upon conviction thereof, be fined not less than one hundred dollars for the first offense, and not less than three hundred dollars for every subsequent offense, and the offender shall also be liable for damages sustained by the purchaser of such feeding stuff on account of such misrepresentation.

(g) The Dairy and Food Commissioner, by any duly authorized agent, is hereby authorized to select from any package of commercial or other feeding stuff exposed or offered for sale in this State, a quantity not exceeding two pounds for a sample, such sample to be used for the purposes of an official analysis and for comparison with the certificate filed with the Dairy and Food Commissioner, and with the certificate affixed to the package on sale.

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Licence No.	Manufacturer and address.	Brand.	Protein. Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1001	The Harrison-Johnson Co., Toledo, Ohio.	Anchor Brand Chick Feed.	Guaranteed Found.....	4.00 2.38	56.97	5.25 3.10
1002	The Harrison-Johnson Co., Toledo, Ohio.	Anchor Brand Scratch Feed.	Guaranteed Found.....	5.85 3.47	65.78	4.44 3.32
1003	Quaker Oats Co., Chicago, Ill.	Old Tavern Chick Feed.	Guaranteed Found.....	5.00 2.15	60.00 69.21	2.50 2.97
1004	Quaker Oats Co., Chicago, Ill.	Old Tavern Scratch Feed.	Guaranteed Found.....	5.00 2.13	60.00 71.12	2.50 3.83
1005	The Sugarine Co., Chicago, Ill.	Sugarine Dairy Feed.	Guaranteed Found.....	12.00 10.98	46.00 47.49	3.50 4.22
1006	The Sugarine Co., Chicago, Ill.	Sugarine Mixing Feed.	Guaranteed Found.....	12.00 12.12	46.00 51.23	2.00 3.90
1007	East St. Louis Cotton Oil Co., National Stock Yards, Ill.	Cotton Seed Meal.	Guaranteed Found.....	8 to 11	24 to 27	7 to 9
1008	The Harrison-Johnson Co., Toledo, Ohio.	Anchor Brand Developing Feed.	Guaranteed Found.....	2.80		4.85
1009	The Dewey Bros. Co., Blanchester, Ohio.	Corn Three D Grains.	Guaranteed Found.....	8 to 13 10.65	30 to 40 41.03	9 to 14 8.22
1010	Huron Milling Co., Harbor Beach, Mich.	Chopped Feed.	Guaranteed Found.....	3 to 5	67 to 69	3 to 4
1011	Huron Milling Co., Harbor Beach, Mich.	Jenks Gluten Feed.	Guaranteed Found.....	5 to 8 7.62	52 to 54 54.65	3 to 5 5.63
1012	Huron Milling Co., Harbor Beach, Mich.	Mixed Feed.	Guaranteed Found.....	5.85 8.35	68.32 59.33	4.60 4.31
1013	Amendt Milling Co., Monroe, Mich.	Amco Chick Feed.	Guaranteed Found.....	4.00 2.00	69.75 66.09	2.50 3.03
1014	Clinton Sugar Refining Co., Clinton, Iowa.	Clinton Gluten Feed.	Guaranteed Found.....	7.50 7.72	55.00 53.60	3.00 3.27
1015	American Milling Co., Chicago, Ill.	Amco Chick Feed.	Guaranteed Found.....	5.00 2.47	65.00 71.44	3.00 3.27

1016	American Milling Co., Chicago, Ill.	Amco Hen Feed.	Guaranteed. Found.	10.00 13.30	5.00 2.20	65.00 68.43	3.00 2.43
1017	Cheboygan Flour Mill Co., Cheboygan, Mich.	Highland Scratch Feed.	Guaranteed. Found.	9.63 9.63	3.87 3.87	63.52 63.52	3.17 3.17
1018	Bad Axe Grain Co., Bad Axe, Mich.	Axe Brand Ground Feed.	Guaranteed. Found.	10.33 14.26	6.50 4.90	63.49 65.88	3.45 2.90
1019	Bad Axe Grain Co., Bad Axe, Mich.	Egg Brand Poultry Feed.	Guaranteed. Found.	10.59 10.67	4.95 4.10	64.30 66.42	3.25 2.70
1020	Joseph Schlitz Brewing Co., Milwaukee, Wis.	Schlitz Purity Dried Grains.	Guaranteed. Found.	26.00 26.06	14.00 18.70	40.00 39.69	6.00 6.45
1021	American Lined Co., Toledo, Ohio.	Old Process Lined Oil Meal.	Guaranteed. Found.	32 to 36 39.02	54 to 7 3.78	37.50	5 to 7 6.00
1022	King Milling Co., Lowell, Mich.	King Corn Meal.	Guaranteed. Found.	9.54 9.28	3.60 3.90	66.99 71.45	7.39 7.07
1023	A. L. Hibbard, Sturgis, Mich.	No. 1 Chop.	Guaranteed. Found.	8.84 9.80	4.75 4.70	71.05 69.50	4.30 4.40
1024	Hankey Milling Co., Potoskey, Mich.	"Corn Meal"	Guaranteed. Found.	9.71	3.37	70.24	5.32
1025	Quaker Oats Co., Chicago, Ill.	Quaker Molasses Dairy Feed.	Guaranteed. Found.	16.00 10.50	12.00 11.13	50.00 61.91	3.50 4.23
1026	Quaker Oats Co., Chicago, Ill.	Schumacher Stock Feed.	Guaranteed. Found.	10.00 10.94	10.00 11.22	60.00 61.29	3.25 3.88
1027	Quaker Oats Co., Chicago, Ill.	Victor Feed.	Guaranteed. Found.	7.50 8.31	12.00 12.23	60.00 63.26	3.00 4.05
1028	Quaker Oats Co., Chicago, Ill.	Max-All Corn Feed.	Guaranteed. Found.	9.50 7.53	2.00 .20	80.00 78.69	1.40 1.55
1029	Quaker Oats Co., Chicago, Ill.	Schumacher Calf Meal.	Guaranteed. Found.	19.00 20.56	3.00 2.00	54.00 55.30	8.00 7.99
1030	Quaker Oats Co., Chicago, Ill.	High Life Poultry Food.	Guaranteed. Found.	10.00	5.00	60.00	2.50
1031	Quaker Oats Co., Chicago, Ill.	Quaker Chick Feed.	Guaranteed. Found.	10.00 11.90	5.00 2.35	60.00 74.26	2.50 3.45
1032	Quaker Oats Co., Chicago, Ill.	Quaker Scratching Grains.	Guaranteed. Found.	10.00 11.38	5.00 2.88	60.00 70.44	2.50 3.20
1033	Quaker Oats Co., Chicago, Ill.	Schumacher Scratching Grains.	Guaranteed. Found.	10.00 10.94	5.00 2.44	60.00 69.46	2.50 3.13

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Lot No.	Manufacturer and address.	Brand.		Protein. Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1034	Quaker Oats Co., Chicago, Ill.	American Hen Scratching Grains.	Guaranteed Found.	10.00 10.15	5.00 2.03	60.00 66.94	2.50 2.95
1035	Quaker Oats Co., Chicago, Ill.	Schumacher Little Chick Feed.	Guaranteed Found.	10.00 10.68	5.00 2.38	60.00 68.03	2.50 3.53
1036	The Sherwin-Williams Co., Cleveland, Ohio.	Linseed Meal.	Guaranteed Found.	33.00	8.00		6.00
1037	King Milling Co., Lowell, Mich.	King Corn and Oat Feed.	Guaranteed Found.	10.06 10.32	5.40 4.63	65.09 69.61	6.63 6.27
1038	The Metzger Seed & Oil Co., Toledo, Ohio.	Old Process Oil Meal.	Guaranteed Found.	30 to 36 32.73	2 to 10 9.20	39.04	5 to 7 6.19
1039	Chapin & Co., Inc., Milwaukee and Hammond, Ind.	Unicorn Dairy Ration.	Guaranteed Found.	26.00 25.29	9 to 10 10.00	40 to 50 48.35	5.5 to 6.5 5.76
1040	Postum Cereal Co., Ltd., Battle Creek, Mich.	Flaked Corn.	Guaranteed Found.	9.62 8.75	1.00 1.35	81.83 75.01	1.61 3.85
1041	Postum Cereal Co., Ltd., Battle Creek, Mich.	Grape Nut Feeding Stuff.	Guaranteed Found.	10.86 10.41	2.69 1.50	76.49 77.10	1.65 1.65
1042	Postum Cereal Co., Ltd., Battle Creek, Mich.	Cereal Feeding Stuff.	Guaranteed Found.	11.12 12.25	14.52 11.30	57.92 60.59	1.93 2.60
1043	C. E. DePuy Co., Stockbridge, Mich.	Peerless Scratch Feed.	Guaranteed Found.	8.31 10.32	2.16 2.45	69.73 73.76	2.78 3.07
1044	C. E. DePuy Co., Stockbridge, Mich.	Victor Chick Feed.	Guaranteed Found.	8.14 9.19	2.46 2.15	65.30 73.32	3.87 3.50
1045	Michigan Cereal Co., Port Huron, Mich.	No. 2 Chop.	Guaranteed Found.	5.18	17.48	59.33	2.19
1046	Michigan Cereal Co., Port Huron, Mich.	Pea Bran.	Guaranteed Found.	12.88 16.01	37.98 30.32	35.81 41.61	1.45 1.65
1047	McMoran Milling Co., Port Huron, Mich.	No. 2 Chop.	Guaranteed Found.	5.18	17.48	59.33	2.19
1048	Corn Products Refining Co., New York.	Buffalo Gluten Feed.	Guaranteed Found.	23 to 25 25.99	8.50 7.65	50 48.21	2.50 2.65

1049	Corn Products Refining Co., New York.	Diamond Hog Meal.	Guaranteed Pound.	18 to 20 18.99	*13.00 10.81	50.00 46.71	8 to 9 9.80
1050	Thunder Bay Milling Co., Alpena, Mich.	Coarse Corn Meal.	Guaranteed Pound.	7.87	1.85	75.70	2.70
1051	International Sugar Feed Co., Minneapolis, Minn.	International Special Molasses Feed.	Guaranteed Pound.	12.50	12.00		3.50
1052	International Sugar Feed Co., Minneapolis, Minn.	International Dairy Feed.	Guaranteed Pound.	16.50	12.00		3.50
1053	Humphreys-Godwin Co., Memphis, Tenn.	Dixie Brand Cotton Seed Meal.	Guaranteed Pound.	38 1/2 to 43 39.55	10 to 13 8.00	26.00 31.67	7 to 9 6.97
1054	Postum Cereal Co., Ltd., Battle Creek, Mich.	Barley Bran.	Guaranteed Pound.	7.81 10.41	25.66 14.38	52.10 57.53	1.46 3.07
1055	Midland Lined Co., Minneapolis, Minn.	Midland Brand Old Process Oil Meal.	Guaranteed Pound.	22.00 30.87	8.50 6.75	35.41	6.00 7.53
1056	Roberts Cotton Oil Co., Caro, Ill.	Cotton Seed Meal.	Guaranteed Pound.	40 to 41 40.34	8 to 9 7.08	27.88	5.5 to 6.5 12.10
1057	Beck Cereal Co., Detroit.	Royal Chop Feed.	Guaranteed Pound.	10.00 8.22	9.00 7.18	60.00 66.32	7.00 4.84
1058	The Michigan Mills, Chicago, Ill.	Michigan Mills Old Process Oil Meal.	Guaranteed Pound.	30 to 36 34.65	6 to 10 7.05	37 to 42 36.87	5 to 8 7.00
1059	Swift & Co., Chicago, Ill.	Swift's Digester Tankage.	Guaranteed Pound.	60.00 61.56			8.00 9.33
1060	Swift & Co., Chicago, Ill.	Swift's Special Beef scrap.	Guaranteed Pound.	50.00 52.15			8.00 10.82
1061	Darrah Milling Co., Big Rapids, Mich.	Unbolted Corn Meal.	Guaranteed Pound.	9.54	2.73	62.80	5.58
1062	F. J. Stuart, Pontiac, Mich.	Stuart's Chicken Feed.	Guaranteed Pound.	8.66 9.36	3.32 3.33	71.89 70.02	2.85 3.90
1063	Quaker Oats Co., Chicago, Ill.	Boys Feed.	Guaranteed Pound.	8.00 8.12	12.00 10.25	62.00 66.45	3.00 4.57
1064	Quaker Oats Co., Chicago, Ill.	Gregg's Calf Meal.	Guaranteed Pound.	25.00 26.29	5.00 4.45	53.00 51.74	5.00 6.48
1065	Quaker Oats Co., Chicago, Ill.	Dairy Dairy Feed.	Guaranteed Pound.	15.00 16.05	12.00 12.53	62.00 52.88	3.00 2.29
1066	Grand Rapids Brewing Co., Grand Rapids, Mich.	Brewers' "Dried Grains"	Guaranteed Pound.	25.37 30.28	13.60 12.18	37.78 43.37	7.50 5.57

*Plus carbon.

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

License No.	Manufacturer and address.	Brand.	Protein. Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1067	Portland Milling Co., Portland, Mich.	Champion Mixed Feed.....	15.84 Found	9.40 6.15	56.77 58.99	4.15 4.68
1068	Portland Milling Co., Portland, Mich.	Puritas Corn & Oats Feed.....	11.11 Found	4.15 3.52	68.60 68.19	4.20 3.84
1069	Cheboygan Flour Mill Co., Cheboygan, Mich.	Corn Germ Meal.....	9.27 Found	3.02	69.48	6.62
1070	American Linseed Co., Chicago, Ill.	Wright & Hills Brand Old Process Linseed Oil Meal.....	32 to 34 37.80 Found	5.5 to 7 6.95	42.00 34.01	6.00 6.14
1071	Ferdinand Becker, Grand Rapids, Mich.	Coarse Corn Meal.....	8.40 Found	2.00 1.85	67.71 73.58	2.65 4.62
1072	Wm. Fluemer, Mt. Clemens, Mich.	Fluemer's Chicken Feed.....	10.50 Found	4.55 2.28	62.30 72.84	3.15 3.25
1073	The U. S. Frumentum Co., Detroit, Mich.	Frumentum Hominy Feed.....	9.50 Found	7.00 4.10	64.49	8.00 7.42
1074	The Guy G. Major Co., Toledo, Ohio.	Old Process Oil Meal.....	30 to 36 33.51 Found	2 to 10 9.20	35.90	5 to 7 6.35
1075	National Food Co., Fond du Lac, Wis.	No-Milk Calf Food.....	17.25 20.04 Found	6.00 3.95	60.72	5.00 4.80
1076	West Branch Flour Mfg. Co., West Branch, Mich.	Stk. Car Feed.....	8.57 Found	3.10 3.10	72.47 72.47	4.25 4.25
1077	Mayflower Mills, Fort Wayne, Ind.	Chop Feed.....	9.50 Found	5.00	67.50	5.00
1078	Amendt Milling Co., Monroe, Mich.	No. 2 Chop Feed.....	7.87 8.14 Found	10.95 8.09	64.62 68.05	3.92 3.75
1079	Amendt Milling Co., Monroe, Mich.	Scratch Grain.....	9.54 9.63 Found	4.30 2.66	68.51 66.87	2.40 3.25
1080	Thoman Milling Co., Lansing, Mich.	Thomco Corn & Oats Feed.....	9.96 Found	5.63 3.80	70.39 69.36	4.35 3.87
1081	Continental Cereal Co., Peoria, Ill.	Continental Gluten Feed.....	31.00 29.14 Found	8.50 8.05	36.40 37.27	13.5 13.6

1082	Armour Fertilizer Works, Chicago, Ill.	Armour's Blood Meal.....	Guaranteed Found.....	80.00 82.78	1.5	.....	28
1083	Armour Fertilizer Works, Chicago, Ill.	Armour's Beef Scraps.....	Guaranteed Found.....	55.00 57.31	1.5	.....	17.57
1084	Armour Fertilizer Works, Chicago, Ill.	Armour's Poultry Bone.....	Guaranteed Found.....	25.00 26.03	1.5	.....	.....
1085	H. M. Hobart, Detroit, Mich.	P & H Chop Feed.....	Guaranteed Found.....	8.75 9.54	5.22 4.50	60.58 70.20	3.92 4.06
1086	International Sugar Feed Co., Minneapolis, Minn.	International Horse Feed.....	Guaranteed Found.....	12.50 13.88	12.00 13.33	.....	4.02
1087	Hirst & Begley Linseed Co., Chicago, Ill.	Hirst & Begley Oil Meal.....	Guaranteed Found.....	34.00 33.07	9.00 7.70	42.00 37.66	8.00 10.12
1088	Malta Vita Pure Food Co., Battle Creek, Mich.	Malta Vita Wheat Flakes and Malta Vita Corn Flakes.....	Guaranteed Found.....	8.49 8.49	.63 .63	82.75 82.75	1.00 1.00
1089	Chas. A. Krause Milling Co., Chicago, Ill.	Badger Alfalfa Horse & Mule Feed.....	Guaranteed Found.....	10.00 10.94	12.00 7.54	56.00 61.52	2.00 3.10
1090	American Milling Co., Chicago, Ill.	Sucrene Dairy Feed.....	Guaranteed Found.....	16.50 15.05	12.00 12.42	46.00 42.83	3.50 4.30
1091	American Milling Co., Chicago, Ill.	Sucrene Horse & Mule Feed.....	Guaranteed Found.....	10.00 10.35	12.00 11.74	50.00 55.57	3.50 3.23
1092	Callam Mills, Saginaw, Mich.	Bob White Poultry Feed.....	Guaranteed Found.....	9.26 11.46	3.75 2.95	67.97 73.53	3.05 3.04
1093	Stark & Neckel, Detroit, Mich.	Prize Chop Feed.....	Guaranteed Found.....	7.61 8.49	9.25 2.86	66.54 70.87	4.12 4.40
1094	Stark & Neckel, Detroit, Mich.	Prize Chicken Feed.....	Guaranteed Found.....	10.06 10.06	3.88 3.88	68.31 68.31	4.35 4.35
1095	Alma Grain & Lumber Co., Alma, Mich.	Alma Molasses Stock Food.....	Guaranteed Found.....	12.51 12.51	12.33 12.33	55.84 55.84	3.60 3.60
1096	The Illinois Seed Co., Chicago, Ill.	Monitor Brand Chick Feed.....	Guaranteed Found.....	10.00 10.68	5.00 1.68	60.00 69.06	2.50 3.73
1097	The Illinois Seed Co., Chicago, Ill.	Phoenix Brand Poultry Feed.....	Guaranteed Found.....	10.00 10.35	5.00 2.15	60.00 67.06	2.50 2.47
1098	F. W. Brode & Co., Memphis, Tenn.	Owl Brand Cotton Seed Meal.....	Guaranteed Found.....	41.00 40.47	10.00 9.16	.....	6.50 6.95
1099	Ralston Purina Co., St. Louis, Mo.	Purina Mill Feed (Scratch Size).....	Guaranteed Found.....	11.00 11.20	4.00 2.80	.....	3.92

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Lot No.	Manufacturer and address.	Brand.	Protein. Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1100	Ralston Purina Co., St. Louis, Mo.	Purina Mill Feed (Chick Size)	11.00	4.00	69.15	3.65
1101	Illinois Feed Mills, St. Louis, Mo.	Feed-Well Mill Feed (Chick Size)	11.63	2.28		
1102	The Buckeye Cotton Oil Co., Cincinnati, Ohio.	"Buckeye" Brand Cottonseed Meal.	10.00	6.00	70.03	3.50
1103	S. P. Davis, Little Rock, Ark.	Good Luck Cotton Seed Meal Cracked Screened Cake.	10.59	2.59	31 to 32	64 to 74
1104	Valley City Milling Co., Grand Rapids, Mich.	Street Car Feed.	38½ to 41	8 to 10	30.36	8.45
1105	Valley City Milling Co., Grand Rapids, Mich.	No. 1 Fine Ground Feed.	41.13	7.10		
1106	Valley City Milling Co., Grand Rapids, Mich.	Coarse Corn Meal.	41.00	10.50	32.31	7.09
1107	The J. W. Biles Co., Cincinnati, Ohio.	Ubiko Union Grains, Biles' Ready Ration.	38.33	7.27		
1108	S. A. Guard, Allegan, Mich.	The Best Poultry Food	8.84	2.97	70.43	2.30
1109	McLaughlin-Ward & Co., Jackson, Mich.	"Crown" Brand Scratch Grain.	10.33	3.85	71.32	4.65
1110	American Maise Oil Refining Co., Indianapolis, Ind.	Mainina Oilalfa Feed.	9.28	4.20	65.32	5.97
1111	American Maise Oil Refining Co., Indianapolis, Ind.	Mainina Germ Oil Meal.	10.41	2.53	70.58	5.50
1112	Commercial Milling Co., Detroit, Mich.	Fine White Feed.	9.84	1.90	69.87	3.05
1113	Commercial Milling Co., Detroit, Mich.	Hankel's Chop Feed.	10.41	2.24	70.85	5.67
1114	Commercial Milling Co., Detroit, Mich.	Coarse Brown Feed.	24.00	9.00	50.00	7.00
			9.84	4.25	67.61	2.35
			9.84	4.25	67.61	2.35
			10.15	3.00	64.53	5.05
			10.76	2.72	66.95	3.25
			18.00	15.00	48.00	4.50
			14.79	15.45	44.69	11.45
			22.00	4.50		6.00
			16.62	1.60	50.08	16.90
			15 to 18	3 to 4	65 to 75	3½ to 5
			16.28	4.20	59.78	4.15
			8 to 10	7 to 8	60 to 70	5 to 6
			8.27	5.32	69.84	3.75
			15 to 17	7 to 8	55 to 65	4 to 6
			16.93	6.85	57.37	4.82

1115	Northrup-King & Co., Minneapolis, Minn.	Sterling Baby Chick Starter	Guaranteed Found	12.25 13.21	4.51 2.00	61.87 66.16	2.70 2.37
1116	Northrup-King & Co., Minneapolis, Minn.	Sterling Chick Feed	Guaranteed Found	12.25 13.13	4.51 2.35	61.87 66.00	2.70 2.80
1117	Northrup-King & Co., Minneapolis, Minn.	Sterling Hen Feed	Guaranteed Found	11.67 11.96	4.61 1.75	65.06 72.30	3.42 2.70
1118	Star of the West Milling Co., Frankenthuth, Mich.	"Special Feed"	Guaranteed Found	8.57 9.36	8.97 9.25	67.27 67.65	3.65 3.70
1119	C. C. Wright, Orono, Mich.	Occident Chick Feed	Guaranteed Found	9.54 9.63	2.87 2.92	69.71 67.66	2.50 2.63
1120	C. C. Wright, Orono, Mich.	Wright's Scratch Feed	Guaranteed Found	9.19 9.63	3.77 3.16	67.24 66.23	2.60 2.70
1121	Western Grain Products Co., Hammond, Ind.	Hammond Dairy Feed	Guaranteed Found	17.00 16.29	11.00 12.37	50.00 46.34	3.00 3.28
1122	Western Grain Products Co., Hammond, Ind.	Hammond Horse Feed	Guaranteed Found	12.00 13.48	11.00 10.25	50.00 59.11	2.80 2.50
1123	The Commercial Milling Co., Detroit, Mich.	Feed Corn Meal	Guaranteed Found	8.50 to 9 8.50	1.50 to 2 .45	65 to 70 75.77	4 to 5 2.43
1124	International Stock Food Co., Minneapolis, Minn.	Grofast Calf Meal	Guaranteed Found	25.00 28.95	10.00 8.35	46.00 46.32	5.00 5.30
1125	Albert Hyde, Grand Rapids, Mich.	Coarse Corn Meal	Guaranteed Found	8.75	1.95	73.23	2.90
1126	Darling & Co., Chicago, Ill.	Darling's Beef Meal	Guaranteed Found	45.00 49.26	3.00		8.00 8.88
1127	Darling & Co., Chicago, Ill.	Darling's Granulated Bone	Guaranteed Found	20.00 25.38			2.00 2.46
1128	Darling & Co., Chicago, Ill.	Darling's Beef Scraps	Guaranteed Found	55.00 55.30	2.50		10.00 11.50
1129	Darling & Co., Chicago, Ill.	Darling's Laying Food	Guaranteed Found	18.00 19.16	10.00 5.35	40.00 48.66	3.50 4.35
1130	Darling & Co., Chicago, Ill.	Darling's Chick Feed	Guaranteed Found	10.00 11.11	5.00 2.98	65.00 66.31	2.50 2.78
1131	Darling & Co., Chicago, Ill.	Darling's Scratching Food	Guaranteed Found	10.00	5.00	65.00	2.50
1132	J. W. Biles Co., Cincinnati, Ohio	Biles Four XXXX Distillers Dried Grains	Guaranteed Found	31.00	13.00	35.00	12.00

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Lic- ense No.	Manufacturer and address.	Brand.	Protein— Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1133	Joseph Wellman & Sons, Port Huron, Mich.	Mixed Chicken Feed	9.01 9.29	3.30 3.20	70.88 68.82	3.40 3.63
1134	The Albert Dickinson Co., Chicago, Ill.	Globe Scratch Feed	10.00 11.29	5.00 2.77	60.00 69.45	2.50 3.25
1135	The Albert Dickinson Co., Chicago, Ill.	Pine Tree Scratch Feed	10.00 10.33	5.00 3.30	60.00 66.68	2.50 2.85
1136	The Albert Dickinson Co., Chicago, Ill.	White Cross Scratch Feed	10.00 10.85	5.00 2.27	60.00 70.79	2.50 3.58
1137	The Albert Dickinson Co., Chicago, Ill.	Sun Chick Starter	10.00 10.68	5.00 2.10	60.00 68.49	2.50 2.55
1138	The Albert Dickinson Co., Chicago, Ill.	Crescent Chick Feed	10.00 10.50	5.00 1.00	60.00 63.79	2.50 2.38
1139	The Albert Dickinson Co., Chicago, Ill.	White Cross Chick Feed	10.00 9.98	5.00 2.80	60.00 61.63	2.50 2.65
1140	The Albert Dickinson Co., Chicago, Ill.	Colonial Developing Feed	10.00 10.06	5.00 4.85	60.00 62.87	2.50 3.65
1141	The Albert Dickinson Co., Chicago, Ill.	King Pigeon Feed	10.00 11.64	5.00 2.81	60.00 64.74	2.50 2.92
1142	The Albert Dickinson Co., Chicago, Ill.	Queen Poultry Mash	11.00 11.99	10.00 8.24	60.00 54.03	2.50 3.50
1143	The Albert Dickinson Co., Chicago, Ill.	White Cross Horse Feed	10.00	8.00	60.00	2.50
1144	The Albert Dickinson Co., Chicago, Ill.	White Cross Stock Feed	10.00	10.00	60.00	3.50
1145	The Albert Dickinson Co., Chicago, Ill.	Alfalfa Meal	12.00 13.13	35.00 32.17	60.00 37.57	1.00 1.60
1146	Henderson & Son, Grand Rapids, Mich.	Corn Meal	7.79	1.85	74.50	3.90
1147	Cronwell & Sons, Detroit, Mich.	Manhattan Food	10.68 11.33	2.83 2.39	64.36 64.10	4.30 4.32

1148	Cronanwett & Sons, Detroit, Mich.	Manhattan Poultry Food	Guaranteed Found	5.20 11.29	5.35 6.81	70.62 57.65	4.05 3.57
1149	The Grain Products Co., Battle Creek and Detroit, Mich.	Flake Feed	Guaranteed Found	9.10 9.54	1.42 1.10	78.40 72.35	2.60 4.50
1150	G. A. Guard (Handy Electric Mills), Allegan, Mich.	Chick Food	Guaranteed Found	8.75 8.75	1.85 1.85	72.39 72.39	2.70 2.70
1151	Douglas & Co., Cedar Rapids, Iowa.	Cedar Rapids Gluten Feed.	Guaranteed Found	20 to 25 24.76	8.00 8.12	56.58 56.94	3.00 3.00
1152	Evans Milling Co., Indianapolis, Ind.	Evans Hominy Feed	Guaranteed Found	10.00	7.00		7.50
1153	American Milling Co., Chicago, Ill.	Anco Cottonseed Meal	Guaranteed Found	41.00 40.96	10.00 7.70	20.00 29.22	8.00 8.68
1154	American Milling Co., Chicago, Ill.	Cluck Chick Hen Feed	Guaranteed Found	10.00	5.00	60.00	3.00
1155	Battle Creek Health Stock Food Co., Battle Creek, Mich.	Battle Creek Health Stock Food	Guaranteed Found	29.31 31.66	8.88 3.93	36.23 37.11	5.14 6.42
1156	Argo Milling Co., Charlevoix, Mich.	Corn Meal	Guaranteed Found	10.41	3.40	69.44	5.55
1157	Watson-Higgins Milling Co., Grand Rapids, Mich.	Hoyle Scratch Feed.	Guaranteed Found	9.61 9.45	2.71 2.52	67.74 70.26	3.05 2.63
1158	Watson-Higgins Milling Co., Grand Rapids, Mich.	Fine Corn Meal	Guaranteed Found	7.35 7.44	1.78 1.20	77.19 81.93	1.55 1.68
1159	American Milling Co., Chicago, Ill.	Sucrose Mixing Feed	Guaranteed Found	10.00 11.38	12.00 13.40	46.00 55.74	2.00 4.06
1160	Scheuren & Mok, Detroit, Mich.	Chop Feed, Corn and Oats.	Guaranteed Found	7.09 8.14	5.30 4.95	70.80 72.01	2.65 3.00
1161	Scheuren & Mok, Detroit, Mich.	S. & M. Chick Feed	Guaranteed Found	11.03 11.11	3.05 3.20	69.29 71.97	3.65 2.46
1162	Scheuren & Mok, Detroit, Mich.	Special Mixed Chicken Feed	Guaranteed Found	9.45 10.68	3.55 2.52	69.01 70.69	3.43 3.41
1163	The Park & Pollard Co., Boston, Mass.	Dry Mash	Guaranteed Found	20.00 16.54	10.00 6.27		3.00 4.02
1164	The Park & Pollard Co., Boston, Mass.	Scratch Feed	Guaranteed Found	10 to 12	5.00	55.79	
1165	The Park & Pollard Co., Boston, Mass.	Growing Feed	Guaranteed Found	10.00 15.84	5.00 5.28	57.44	3.50 4.35

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Loc. No.	Manufacturer and address.	Brand.	Guaranteed. Found.	Protein. Per cent.	Crude fiber. Per cent.	Nitrogen— Free extract. Per cent.	Ether extract. Per cent.
1166	The Park & Pollard Co., Boston, Mass.	Gristless Chick Feed	Guaranteed. Found.	10 to 13	5.00		2.77
1167	The Park & Pollard Co., Boston, Mass.	Red Ribbon Chick Feed	Guaranteed. Found.	10 to 12	5.00		3.50
1168	Continental Cereal Co., Peoria, Ill.	Sweetheart Poultry, Chick and Pig Feed	Guaranteed. Found.	14.50 15.84	7.50 5.95	56.00 61.14	6.00 6.05
1169	The American Cotton Oil Co., New York.	Choice Cotton Seed Meal	Guaranteed. Found.	41.00 40.77	10.50 8.44		
1170	Lichtenberg & Son, Detroit, Mich.	Lichtenberg's Chop	Guaranteed. Found.	8.06 8.23	8.86 7.25	61.38 66.52	3.76 3.70
1171	Lichtenberg & Son, Detroit, Mich.	Farmel Horse & Cattle Feed	Guaranteed. Found.	10.85 10.94	7.30 7.25	67.04 63.53	4.05 4.10
1172	J. E. Bartlett Co., Jackson, Mich.	Creamo Brand Cotton Seed Feed Meal	Guaranteed. Found.	20.00 23.36	22.00 20.25	25.00 37.47	5.00 4.58
1173	David Slott, Detroit, Mich.	Winner Chop Feed	Guaranteed. Found.	8 to 9 9.27	10.00 10.00	70.00 60.02	5.00 7.50
1174	Edwards & Loomis Co., Inc., Chicago, Ill.	Red Comb Poultry Feed	Guaranteed. Found.	10.00 11.46	5.00 2.31	60.00 66.85	2.50 3.15
1175	Edwards & Loomis Co., Inc., Chicago, Ill.	Red Comb Coarse Chick Feed	Guaranteed. Found.	10.00 10.59	5.00 2.49	60.00 72.54	2.50 2.70
1176	Edwards & Loomis Co., Inc., Chicago, Ill.	Red Comb Fine Chick Feed	Guaranteed. Found.	10.00 10.41	5.00 2.74	60.00 62.91	2.50 3.20
1177	Edwards & Loomis Co., Inc., Chicago, Ill.	Red Comb Meat Mash	Guaranteed. Found.	15.00 15.84	8.00 8.80	45.00 51.47	4.00 3.70
1178	Edwards & Loomis Co., Inc., Chicago, Ill.	Red Comb Pigeon Feed	Guaranteed. Found.	10.00 12.34	5.00 2.90	60.00 67.43	2.50 2.60
1179	Edwards & Loomis Co., Inc., Chicago, Ill.	Cackle Poultry Feed	Guaranteed. Found.	9.50 9.19	5.00 1.90	60.00 65.76	2.60 2.60
1180	Cancelled		Guaranteed. Found.				

1181	Edwards & Loomis Co., Inc., Chicago, Ill.	Cattle Fine Chick Feed...	Guaranteed Found.....	9.50 10.55	5.00 1.92	60.00 66.43	2.50 3.30
1182	Edwards & Loomis Co., Inc., Chicago, Ill.	Excelsior Horse Feed...	Guaranteed Found.....	10.00	8.00	60.00	3.00
1183	Edwards & Loomis Co., Inc., Chicago, Ill.	Pioneer Horse & Cattle Feed...	Guaranteed Found.....	7.50 7.52	8.00 6.92	60.00 70.84	2.50 2.70
1184	Edwards & Loomis Co., Inc., Chicago, Ill.	Harvest Horse Feed...	Guaranteed Found.....	9.00 13.83	15.00 15.05	50.00 51.89	2.00 1.85
1185	Corunna Milling Co., Corunna, Mich.	Corunna Chicken Feed...	Guaranteed Found.....	10.02 10.50	3.37 3.15	65.65 72.16	3.33 3.23
1186	Standard Grocer & Milling Co., Holland, Mich.	Standard Scratch Feed...	Guaranteed Found.....	9.36 10.15	3.66 3.03	71.50 70.53	2.78 2.87
1187	Quaker Oats Co., Chicago, Ill.	Blue Ribbon Dairy Feed...	Guaranteed Found.....	25.00 23.83	9.00 10.72	46.00 45.04	4.00 4.38
1188	Quaker Oats Co., Chicago, Ill.	Blue Ribbon Chick Feed...	Guaranteed Found.....	10.00 10.76	5.00 2.38	60.00 67.21	2.50 3.36
1189	Wykes & Co., Grand Rapids, Mich.	Y. X. Corn Meal...	Guaranteed Found.....	8.31 9.80	2.05 2.03	72.76 75.51	4.32 4.25
1190	Wykes & Co., Grand Rapids, Mich.	Y. X. Cottonseed Meal...	Guaranteed Found.....	41 to 43 39.73	8 to 10 6.83	32.64	7 to 9 9.55
1191	Wykes & Co., Grand Rapids, Mich.	Old Process Laxo Cake Meal...	Guaranteed Found.....	25 to 30 26.16	9 to 11 8.32	40 to 45 40.42	8 to 12 8.20
1192	The Exchange Cotton & Lined Meal Co., Kansas City, Mo.	Rose Brand Cotton Seed Meal and Cake...	Guaranteed Found.....	41.00 41.21	10.00 9.53	6.00 27.80	8.00 7.95
1193	Christian Breisch & Co., Lansing, Mich.	White Rock Chick Feed...	Guaranteed Found.....	8.88 9.71	1.90 2.10	68.22 66.03	3.45 2.98
1194	Christian Breisch & Co., Lansing, Mich.	Plymouth Rock Scratch Feed...	Guaranteed Found.....	11.00 10.67	7.80 3.75	65.50 68.35	2.80 3.41
1195	Cancelled.....		Guaranteed Found.....				
1196	American Milling Co., Chicago, Ill.	Anco Alfalfa Meal...	Guaranteed Found.....	13.00 13.30	25.00 29.85	35.00 39.30	2.00 1.53
1197	J. E. Bartlett Co., Jackson, Mich.	Farmer Brand Fancy Choice Cotton Seed Meal...	Guaranteed Found.....	41 to 46 40.16	4 to 10 9.90	20 to 30 27.63	7 to 12 7.53
1198	Hygienic Food Co., Battle Creek, Mich.	Maple-Flake Feed...	Guaranteed Found.....	12.00 11.16	6.00 3.53	66.50 64.95	4.00 3.50

TABULATED ANALYSIS OF COMMERCIAL FEED STUFFS. (YEAR ENDING APRIL 1, 1912).

Life- No.	Manufacturer and address.	Brand.	Protein, Per cent.	Crude fiber, Per cent.	Nitrogen— Free extract, Per cent.	Ether extract, Per cent.
1199	Hygienic Food Co., Battle Creek, Mich.	Corn Flake Feed.....	Guaranteed Found.....	7.00 7.88	0.25 0.45	0.95 1.40
1200	H. P. Boehm, Benton Harbor, Mich.	Star Chicken Grains.....	Guaranteed Found.....	10.33 10.33	2.72 2.72	3.25 3.25
1201	National Feed Co., St. Louis, Mo.	Prime Cotton Seed Meal.....	Guaranteed Found.....	41.00 41.82	14.00 5.30	6.50 26.80
1202	The Bartlett Co., Jackson, Mich.	Blackfords Calf Meal.....	Guaranteed Found.....	25.00 25.64	5.00 5.35	5.00 6.40
1203	Humphreys-Godwin Co., Memphis, Tenn.	No. 77 Feed Meal.....	Guaranteed Found.....	22.00	22.00	5.00
1204	The Bartlett Co., Jackson, Mich.	Bartlett's Corn Flake Feed.....	Guaranteed Found.....	7 to 10 9.49	1 to 3 1.67	3 to 5 1.30
1205	Beck Cereal Co., Detroit, Mich.	Oat Middlings.....	Guaranteed Found.....	10.98 11.29	20.17 20.82	5.35 4.23
1206	East St. Louis Cotton Oil Co., National Stock Yards, Ill.	Cotton Seed Meal.....	Guaranteed Found.....	32 to 38 38.59	10 to 14 9.15	6 to 9 8.07
1207	East St. Louis Cotton Oil Co., National Stock Yards, Ill.	East St. Louis Brand Cotton Seed Meal.....	Guaranteed Found.....	38 62 to 43 41.48	8 to 12 7.58	6 to 8 9.32
1208	Chas. A. Krause Milling Co., Milwaukee, Wis.	Badger Evergreen Feed.....	Guaranteed Found.....	10.00 12.69	20.00 16.68	1.00 .83
1209	Chas. A. Krause Milling Co., Milwaukee, Wis.	Badger Dairy Feed.....	Guaranteed Found.....	16.00 16.20	15.00 14.53	2.00 1.44
1210	Imperial Cotto Milling Co., Peoria, Ill.	Imperial Cotto Brand Cotton Seed Meal.....	Guaranteed Found.....	41.00 38.50	9.00 10.29	7.25
1211	The Toledo Grain & Milling Co., Toledo, Ohio	Little Wonder Chop Feed.....	Guaranteed Found.....	7 to 8 8.05	7 to 9 8.05	3 to 4 3.00
1212	Amendt Milling Co., Monroe, Mich.	Feed Meal or Hominy Feed.....	Guaranteed Found.....	9.23 9.63	6.12 3.15	7.61 6.78
1213	Alma Grain & Lumber Co., Alma, Mich.	Alma Molasses Dairy Food.....	Guaranteed Found.....	13.39 13.83	12.40 10.60	2.85 3.15

1214	Sprague, Warner & Co., Chicago, Ill. (Quaker Oats Co., Chicago, Mfrs.)	Cero Brand Poultry Food.....	Guaranteed. Found.....	10 00 11 28	5 00 3 15	60 00 74 51	2 50 3 15
1215	Sprague, Warner & Co., Chicago, Ill. (Quaker Oats Co., Chicago, Mfrs.)	Chico Brand Poultry Food.....	Guaranteed. Found.....	10 00	5 00	60 00	2 50
1216	Spratt's Patent (America), Ltd., Newark, N. J.	Spratt's Patent Ground Meat.....	Guaranteed. Found.....	43 00 56 18	2 00		11 00 8 75
1217	Spratt's Patent (America), Ltd., Newark, N. J.	Spratt's Patent Poultry Food No. 3.....	Guaranteed. Found.....	20 00 19 60	2 00 .51	66 79	3 50 2 11
1218	M. C. Peters Mill Co., Omaha, Neb.	Peters' June Pasture Dairy Meal.....	Guaranteed. Found.....	10 00 12 68	26 00 16 40	44 00 46 96	0 50 0 75
1219	American Maltling Co., Detroit, Mich.	Chicken Feed.....	Guaranteed. Found.....	12 95	4 90	63 94	3 00
1220	A. F. Peavy & Sons, Howell, Mich.	P. V. S. Chicken Feed.....	Guaranteed. Found.....	9 97 10 15	4 47 4 83	67 86 68 93	3 27 3 27

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STATEMENT OF PROSECUTIONS.

FISCAL YEAR ENDING JUNE 30, 1912.

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Defendants discharged	3
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Defendants acquitted	2
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IN TRIAL COURTS.

Defendant.	Charge—Unlawful sale of.	County.	Sentence.
Joseph O. Bruneau	Milk	Houghton	Fined \$20 and costs.
Rosilino Groziano	Ice Cream	Wayne	Fined \$25.
D. Booth	Ice Cream	Chippewa	Fined \$25.
N. Montastson	Ice Cream	Chippewa	Fined \$25.
Herbert O. Wilson	Ice Cream	Berrien	Fined \$100 and costs.
Gincoppo Colaldo	Ice Cream	Wayne	Fined \$25.
Anthony Colega	Ice Cream	Wayne	Fined \$25.
Elmer E. Rouse	Ice Cream	Berrien	Fined \$100 and costs.
Floyd Lehner	Ice Cream	Oakland	Fined \$25.
Lambert Van Dam	Meat	Kalamazoo	Fined \$50.
Elmer J. Peterson	Ice Cream	Muskegon	Fined \$45 and costs.
Simon Brody	Ice Cream	Cass	Fined \$25 and costs.
Claude R. Miller	Ice Cream	Cass	Fined \$25 and costs.
Frits Thurkow	Ice Cream	Cass	Fined \$25 and costs.
West Michigan Ice Cream Co.	Ice Cream	Kent	Acquitted.
Wm. Tattersall	Milk	St. Joseph	Fined \$15 and costs.
J. F. Bobilya	Milk	St. Joseph	Fined \$5 and costs.
Chas. Hoopengartner	Milk	St. Joseph	Fined \$50 and costs.
F. G. Seaman	Spirits of nitre	Calhoun	Fined \$25 and costs.
Hendrick H. Mulder	Milk	Kalamazoo	Fined \$10 and costs.
Chas. Uelsmann	Vinegar	Wayne	Acquitted.
Thomas Banach	Milk	Houghton	Fined \$50 and costs.
E. L. Langworthy	Drug product	Genesee	Fined \$25 and costs.
Louis Georgopoulos	Milk	Kalamazoo	Fined \$5.
Solomon E. Colgrove	Milk	Kalamazoo	Fined \$5.
Charles Benjamin	Milk	Hillsdale	Fined \$10 and costs.
Will Harrington	Milk	Hillsdale	Fined \$10 and costs.
T. Bottruff	Milk	Hillsdale	Fined \$10 and costs.
Henry Middleton	Milk	Kalamazoo	Fined \$5.
Chas. Van Lue	Hamburg steak	Genesee	Fined \$25.
Adrian A. Neal	Milk	Kalamazoo	Fined \$25 and costs.
W. R. Grieve	Buckwheat Flour	Shiawassee	Fined \$25 and costs.
Paris Candy Co.	Candy	Genesee	Fined \$50.
John W. Rusk	Milk	Monroe	Fined \$5 and costs.
Stanley A. Thomas	Oleomargarine	Washtenaw	Fined \$50.
Wesley Craun	Milk	Ingham	Fined \$10 and costs.
Gordon Vinegar Co.	Vinegar	Oakland	Fined \$50.
O. P. Shuler	Spirits of nitre	Eaton	Fined \$3.75 costs.
Alex. Blessing	Milk	Saginaw	Fined \$10 and costs.
Richard Buell	Meat	Genesee	30 days in jail.
Ellis Jacobs	Ice Cream	Monroe	Fined \$6.30 costs.

*Appealed.

COURT PROCEEDINGS.

FISCAL YEAR ENDING JUNE 30, 1912.

CASE NO. 716.

PEOPLE VS. D. ST. AMOUR (NEW CHEBOYGAN HOTEL CO.)

Charge: Not having proper oleomargarine sign displayed in dining room.

In justice court, city of Cheboygan. November 9, 1910: Complaint made. Defendant waived examination and was bound over to the circuit court for trial: Defendant entered plea of guilty. Fined \$50 and costs.

CASE NO. 735.

PEOPLE VS. HENDRICK H. MULDER.

Charge: Selling adulterated milk.

In justice court, city of Kalamazoo. July 7, 1911: Complaint made. January 5, 1912: Defendant convicted. Fined \$10 and costs.

CASE NO. 736.

PEOPLE VS. JOSEPH O. BRUNEAU.

Charge: Selling adulterated milk.

In justice court, city of Houghton. August 18, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$20 and costs.

CASE NO. 737.

PEOPLE VS. POSILINO GROZIANO.

Charge: Selling ice cream below the legal standard.

In police court, City of Detroit. August 22, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$25.

CASE NO. 738.

PEOPLE VS. GINCOTTO COLODO.

Charge: Manufacturing for sale ice cream below the legal standard.

In police court, city of Detroit. August 22, 1911: Complaint made. September 5, 1911: Defendant convicted. Fined \$25.

CASE NO. 739.

PEOPLE VS. ANTHONY COLEGO.

Charge: Manufacturing for sale ice cream below the legal standard.

In police court, city of Detroit. August 22, 1911: Complaint made. September 5, 1911: Defendant convicted. Fined \$25.

CASE NO. 740.

PEOPLE VS. D. BOOTH.

Charge: Manufacturing for sale ice cream below the legal standard.

In justice court, city of Sault Ste. Marie. August 24, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$25.

CASE NO. 741.

PEOPLE VS. N. MONTSATSON.

Charge: Selling ice cream below the legal standard.
In justice court, city of Sault Ste. Marie. August 24, 1911: Complaint made.
Defendant entered a plea of guilty. Fined \$25.

CASE NO. 742.

PEOPLE VS. FLOYD LEHNER.

Charge: Selling ice cream below the legal standard.
In justice court, city of Pontiac. August 25, 1911: Complaint made. September 23, 1911: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 743.

PEOPLE VS. HERBERT O. WILSON.

Charge: Selling ice cream below the legal standard.
In justice court, city of Benton Harbor. August 29, 1911: Complaint made.
Defendant entered a plea of guilty. Fined \$100 and costs.

CASE NO. 744.

PEOPLE VS. ELMER E. ROUSE.

Charge: Selling ice cream below the legal standard.
In justice court, city of Benton Harbor. August 29, 1911: Complaint made.
September 14, 1911: Defendant convicted. Fined \$100 and costs. Case appealed.

CASE NO. 745.

PEOPLE VS. LAMBERT VAN DAM.

Charge: Selling tainted meat for food purposes.
In justice court, city of Kalamazoo. August 17, 1911: Complaint made. Defendant bound over. September 23, 1911: Defendant entered a plea of guilty. Fined \$50.

CASE NO. 746.

PEOPLE VS. ELMER J. PETERSON.

Charge: Having in possession with intent to sell ice cream below the legal standard.
In justice court, city of Muskegon. September 15, 1911: Complaint made.
Defendant entered a plea of guilty. Fined \$45 and costs.

CASE NO. 747.

FRANK WILSON (PEOPLE VS. WEST MICHIGAN ICE CREAM CO.)

Charge: Selling ice cream below the legal standard.
In justice court, city of Grand Rapids. October 3, 1911: Complaint made.
December 7, 1911: Defendant acquitted.

CASE NO. 748.

PEOPLE VS. SIMON BRODY.

Charge: Selling ice cream below the legal standard.
In justice court, city of Cassopolis. October 18, 1911: Complaint made.
Defendant entered a plea of guilty. Fined \$25 and costs.

STATE OF MICHIGAN.

CASE NO. 749.

PEOPLE VS. CLAUDE R. MILLER.

Charge: Selling ice cream below the legal standard.
In justice court, city of Cassopolis. October 18, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$25 and costs.

CASE NO. 750.

PEOPLE VS. FRITZ THURKOW.

Charge: Selling ice cream below the legal standard.
In justice court, city of Cassopolis. October 18, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$25 and costs.

CASE NO. 751.

PEOPLE VS. WM. TATTERSALL.

Charge: Selling adulterated milk.
In justice court, city of Sturgis. November 1, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$15 and costs.

CASE NO. 752.

PEOPLE VS. J. F. BOBILYA.

Charge: Selling adulterated milk.
In justice court, city of Sturgis. November 2, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$5 and costs.

CASE NO. 753.

PEOPLE VS. CHAS. HOOPENGARNER.

Charge: Selling adulterated milk.
In justice court, city of Sturgis. November 15, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$50 and costs.

CASE NO. 754.

PEOPLE VS. F. G. SEAMAN.

Charge: Selling Sweet Spirits of Nitre which did not conform to legal requirements.

In justice court, city of Albion. November 28, 1911: Complaint made. Defendant entered a plea of guilty. Fined \$25 and costs.

CASE NO. 755.

PEOPLE VS. CHAS. UELSMANN.

Charge: Selling adulterated cider vinegar.
In police court, city of Detroit. December 12, 1911: Complaint made. January 29, 1912: Defendant acquitted.

CASE NO. 756.

PEOPLE VS. THOMAS BANACH.

Charge: Selling adulterated milk.
In justice court, city of Calumet. January 6, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$50 and costs.

CASE NO. 757.

PEOPLE VS. E. L. LANGWORTHY.

Charge: Selling a drug product improperly labeled.
In justice court, city of Flint. January 22, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$25.

CASE NO. 758.

PEOPLE VS. LOUIS GEORGOPOULOS.

Charge: Selling adulterated milk.
In justice court, city of Kalamazoo. February 5, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$5.

CASE NO. 759.

PEOPLE VS. SOLOMAN E. COLGROVE.

Charge: Selling adulterated milk.
In justice court, city of Kalamazoo. February 6, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$5.

CASE NO. 760.

PEOPLE VS. CHAS. BENJAMIN.

Charge: Selling adulterated milk.
In justice court, city of Hillsdale. February 6, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 761.

PEOPLE VS. WILL HARRINGTON.

Charge: Selling adulterated milk.
In justice court, city of Hillsdale. February 15, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 762.

PEOPLE VS. T. BOTRUFF.

Charge: Selling adulterated milk.
In justice court, city of Hillsdale. February 17, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 763.

PEOPLE VS. HENRY MIDDLETON.

Charge: Selling adulterated milk.
In justice court, city of Kalamazoo. February 21, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$5.

CASE NO. 764.

PEOPLE VS. CHAS. VAN LUE.

Charge: Selling Hamburg Steak which contained sulphites.
In justice court, city of Flint. February 27, 1912: Complaint made. Defendant bound over. February 28, 1912: Defendant entered a plea of guilty. Fined \$25.

STATE OF MICHIGAN.

CASE NO. 765.

PEOPLE VS. ADRIAN A. NEAL.

Charge: Selling adulterated milk.

In justice court, city of Kalamazoo. February 28, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$25 and costs.

CASE NO. 766.

PEOPLE VS. W. R. GRIEVE (OWOSSO MILLING CO.)

Charge: Selling adulterated buckwheat flour.

In justice court, city of Corunna. March 4, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$25 and costs.

CASE NO. 767.

PEOPLE VS. JAMES. BENNO (PARIS CANDY CO.)

Charge: Selling adulterated candy.

In justice court, city of Flint. March 5, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$50.

CASE NO. 768.

PEOPLE VS. JOHN W. BUSK.

Charge: Selling adulterated milk.

In justice court, city of Monroe. March 13, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$5.

CASE NO. 769.

PEOPLE VS. WIRT W. WICKHAM.

Charge: Selling adulterated meat.

In justice court, city of Battle Creek. April 12, 1912: Complaint made. May 20, 1912: Case dismissed.

CASE NO. 770.

PEOPLE VS. STANLEY A. THOMAS.

Charge: Serving oleomargarine in dining room of hotel without displaying a proper sign.

In justice court, city of Ann Arbor. April 15, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$50.

CASE NO. 771.

PEOPLE VS. WM. LEWINSTEIN.

Charge: Having in possession with intent to sell meat which had decomposed.

In justice court, city of Marquette. April 18, 1912: Complaint made. Defendant discharged.

CASE NO. 772.

PEOPLE VS. PETER PASCALENS.

Charge: Conducting an insanitary restaurant.

In justice court, city of Battle Creek. April 26, 1912: Complaint made. Case pending.

CASE NO. 773.

PEOPLE VS. WESLEY CRAUN.

Charge: Selling adulterated milk.
In justice court, city of Lansing. May 7, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO 774.

PEOPLE VS. LAFER BROS.

Charge: Illegal advertisement of oleomargarine.
In police court, city of Detroit. May 8, 1912: Complaint made. May 17, 1912: Defendant bound over. Case pending.

CASE NO. 775.

PEOPLE VS. IMPERIAL TEA CO.

Charge: Selling coffee compound, not labeled.
In police court, city of Detroit. May 14, 1912: Complaint made. May 21, 1912: Defendant bound over. Case pending.

CASE NO. 776.

PEOPLE VS. GORDON VINEGAR CO.

Charge: Selling adulterated vinegar.
In municipal court, city of Pontiac. May 15, 1912: Complaint made. May 18, 1912: Defendant entered a plea of guilty. Fined \$50.

CASE NO. 777.

PEOPLE VS. O. P. SHULER.

Charge: Selling sweet spirits of nitre not in conformity with the legal standard.
In justice court, city of Charlotte. May 20, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$3.75 costs.

CASE NO. 778.

PEOPLE VS. HYNDMAN & WAY.

Charge: Selling sweet spirits of nitre not in conformity with the legal standard.
In justice court, city of Jackson. May 20, 1912: Complaint made. Case dismissed.

CASE NO. 779.

PEOPLE VS ALEX. BLESSING.

Charge: Selling adulterated milk.
In justice court, township of Bridgeport, county of Saginaw. May 28, 1912: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 780.

PEOPLE VS. ARTHUR J. SLY.

Charge: Selling decomposed meat.
In justice court, city of Flint. June 5, 1912: Complaint made. June 6, 1912: Defendant waived examination. Case pending.

STATE OF MICHIGAN.

CASE NO. 781.

PEOPLE VS. RICHARD BUELL.

Charge: Selling Hamburg Steak which contained sulphites.
In justice court, city of Flint. June 5, 1912: Complaint made. June 7, 1912:
Defendant entered a plea of guilty Sentenced. to 30 days in jail.

CASE NO. 782.

PEOPLE VS. M. S. CARNEY.

Charge: Selling tincture iodine not in conformity with legal requirements.
In justice court, city of Paw Paw. June 17, 1912: Complaint made. Case
pending.

CASE NO. 783.

PEOPLE VS. ELLIS JACOBS.

Charge: Selling ice cream below the legal standard.
In justice court, village of Dundee. June 24, 1912: Complaint made. Defend-
ant entered a plea of guilty. Fined \$6.30 costs.

CASE NO. 784.

PEOPLE VS. CORNELIUS PASTOOR.

Charge: Using sulphites in the preparation of meat products.
In police court, city of Grand Rapids. June 26, 1912: Complaint made. Case
pending.

FINANCIAL STATEMENT

FINANCIAL STATEMENT.

From July 1, 1911, to June 30, 1912.

Funds available July 1, 1911	\$35,000 00
Fees collected for registration of creameries, cheese factories, etc..	2,320 00
License fees collected for concentrated commercial feeding stuffs....	4,760 00
Fees collected for milk dealers' license	1,560 00
Fees collected for ice cream manufacturers' licenses	2,490 00
Milk bottles sold, etc.	18 90
	\$46,148 90

DISBURSEMENTS.

Gilman M. Dame, Commissioner, salary	\$2,000 00
James W. Helme, Deputy Commissioner, salary	1,438 86
Fern L. Shannon, State Analyst, salary	2,000 00
M. J. Smith, Chief Clerk, salary	1,500 00
L. H. Van Wormer, Assistant Chemist, salary	1,200 00
Ida M. Harris, Clerk, salary	1,000 00
Gertrude Valliere, Clerk, salary	929 78
M. A. Johnston, Clerk, salary	938 55
Nan Childs, Clerk, salary	885 87
Harry A. Wilson, Clerk, salary	224 78
Frank J. McGrath, Clerk, salary	158 40
H. F. Wilson, Clerk, salary	207 80
John Munn, Regular Inspector, salary	1,000 00
A. C. Rowlander, Regular Inspector, salary	1,000 00
John B. Barron, Regular Inspector, salary	1,000 00
George N. Whipple, Regular Inspector, salary	1,000 00
John T. Rowe, Regular Inspector, salary	1,000 00
C. H. Geelhoed, Regular Inspector, salary	940 00
Charles E. Aley, Regular Inspector, salary	940 00
Chas. H. Petrosky, Regular Inspector, salary	782 50
Wm. T. Hulscher, Regular Inspector, salary	126 39
Wm. T. Hulscher, Special Inspector, salary	822 00
Elmer Teall, Special Inspector, salary	939 00
W. O. Watson, Special Inspector, salary	63 00
H. H. Horton, Special Inspector, salary	135 00
D. J. Farrell, Special Inspector, salary	939 00
Henry F. Tuttle, Special Inspector, salary	339 00
C. V. Jones, Special Inspector, salary	387 00
O. F. Meiselbach, Special Inspector, salary	378 00
Harry A. Wilson, Special Inspector, salary	36 00
Wm. N. Miller, Special Inspector, salary	153 00
Postage	769 29
Chemicals, laboratory supplies, etc.	750 58
General expenses (see statement following)	10,022 36
By balance	10,142 74
	\$46,148 90

STATE OF MICHIGAN.

GENERAL EXPENSE INCLUDES.

Gilman M. Dame, Commissioner, expenses	\$436 66
James W. Helme, Deputy Commissioner, expenses	390 69
Fern L. Shannon, expenses	236 64
L. H. Van Wormer, expenses	61 07
John Munn, expenses	874 89
A. C. Rowlander, expenses	723 81
John B. Barron, expenses	687 32
George N. Whipple, expenses	393 02
John T. Rowe, expenses	821 28
C. H. Geelhoed, expenses	313 01
Chas. E. Aley, expenses	303 67
Chas. H. Petrosky, expenses	291 16
Wm. T. Hulscher, expenses	703 07
Elmer Teall, expenses	863 12
Wm. O. Watson, expenses	75 71
H. Horton, expenses	121 67
D. J. Farrell, expenses	830 96
Henry F. Tuttle, expenses	301 78
C. V. Jones, expenses	338 36
O. F. Meiselbach, expenses	237 73
Wm. N. Miller, expenses	146 43
Harry A. Wilson, expenses	251 82
Express	249 42
Messages	239 89
Incidentals	129 18
	<hr/>
	\$10,022 36

DRUG INSPECTION.

From July 1, 1911, to June 30, 1912.

Funds available July 1, 1911	\$6,000 00
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DISBURSEMENTS.

John E. Gerow, Inspector, salary	\$1,000 00
G. W. Sly, Inspector, salary	990 00
A. R. Todd, analyst, salary	892 47
H. P. Palen, analyst, salary	150 01
John E. Gerow, expenses	780 95
G. W. Sly, expenses	769 56
A. R. Todd, expenses	21 24
General expense (drug literature)	33 00
By balance	1,362 77
	<hr/>
	\$6,000 00

APIARY INSPECTION.

From July 1, 1911, to June 30, 1912.

Funds available July 1, 1911	\$500 00
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DISBURSEMENTS.

Garry E. Sanders, Inspector, salary	\$260 00
Garry E. Sanders, Inspector, expenses	154 06
E. B. Tyrrell, Inspector, salary	65 00
By balance	20 94
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	\$500 00

CREAMERIES AND CHEESE FACTORIES.

REGISTERED CREAMERIES, CHEESE FACTORIES, SKIMMING STATIONS, RECEIVING STATIONS, CONDENSED MILK FACTORIES, AND MILK DEPOTS.

FOR THE REGISTRATION YEAR BEGINNING APRIL 1, 1912.

ALLEGAN COUNTY.

Name.	Owner or Manager.	Postoffice.
Hopkins Creamery & Cheese Factory,	Hopkins Creamery Co.,	Hopkins.
Miner Lake Skimming Station,	Hopkins Creamery Co.,	Hopkins.
Monterey Skimming Station,	Hopkins Creamery Co.,	Hopkins.
Wayland Creamery Co.,	E. M. Clark, Secy.,	Wayland.
Kellogg Creamery Co.,	A. N. Hamlin, Mgr.,	Allegan.
Springdale Cheese Factory,	M. W. Hicks,	Hopkins.
Trowbridge Twp. Skimming Station,	Gobleville Creamery Co.,	Gobleville.
Otsego Creamery Co.,	A. A. Bertram, Mgr.,	Otsego.
Pearl Cooperative Creamery Co.,	A. L. Brown, Mgr.,	Pearl.
Hamilton Skimming Station,	Phoenix Cheese Co.,	Zeeland.
Bentheim Creamery Co.,	Albert Smoes, Jr.,	Hamilton, R. F. D. No. 3.
East Saugatuck Creamery Co.,	John Siebelink,	East Saugatuck, No. 1.
Overisel Creamery Co.,	John Peters,	Holland, R. F. D. No. 9.
Oakland Creamery Co.,	Jacob Vredevelt,	Hamilton, No. 1.
Dorr Creamery,	Overton Creamery Co.,	Allegan.
Salem Creamery (Burnips Corners),	Overton Creamery Co.,	Allegan.
Hilliard Creamery,	Frank S. Jankoski,	Hilliards.
Moline Creamery,	Moline Cooperative Creamery Co.,	Moline.

ALPENA COUNTY.

C. N. Daggett Milk Depot,	C. N. Daggett,	Alpena.
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ANTRIM COUNTY.

Mancelona Creamery Co.,	John A. Lake,	Mancelona.
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ARENAC COUNTY.

D. M. Scott Creamery,	D. M. Scott,	Sterling.
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BARAGA COUNTY.

W. H. Oakley Milk Depot,	W. H. Oakley,	Baraga.
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BARRY COUNTY.

Crystal Creamery Co.,	John L. Sherk,	Hastings.
The Freeport Creamery,	Freeport Creamery Co.,	Freeport.
Middleville Cooperative Cr'y. Ass'n.,	Fred O. Stokoe,	Middleville.
Woodland Butter & Cheese Factory,	O. D. Stevens,	Woodland.

BAY COUNTY.

Franklenlust Creamery,	Martin Schwab,	Bay City, Station A.
L. H. Walker Creamery,	L. H. Walker,	Bay City.
Linwood Skimming Station,	L. H. Walker,	Bay City.
Monitor Cheese Factory,	LeRoy Reynolds,	Bay City, Station A, No. 4.
Garfield Twp. Cheese Factory,	Dicaire Bros.,	Pinconning.
Herman Schultz Milk Depot,	Herman Schultz,	Bay City.
Monitor Skimming Station,	J. B. Stevens & Son,	Bay City.
Frankenlust Cheese Factory,	John Berger, Sr.,	Bay City, Station A, No. 5.

BERRIEN COUNTY.

Name.	Owner or Manager.	Postoffice.
Pipestone Jersey Creamery Co.,	George T. Yetter,	Eau Claire.
Watervliet Creamery Co.,	W. M. Baldwin,	Watervliet.
Coloma Creamery Ass'n.,	George W. Grant,	Coloma.
Twin City Creamery Co.,	W. T. Parks,	Benton Harbor.
Dayton Creamery Co.,	F. A. Koenigshof, Secy.,	Dayton.
Glendora Creamery,	Bishop Creamery Co.,	Buchanan.
Hinchman Creamery,	A. C. Miller,	Berrien Springs.
Thorburn Bros. Milk Depot,	Thorburn Bros.,	Benton Harbor.
Berrien Center Elgin Creamery Co.,	Albert S. Ricketts,	Berrien Center.
St. Joseph Valley Creamery Co.,	A. C. Roe,	Buchanan.
Barlow Creamery,	Barlow Bros.,	St. Joseph.
Galen Condensed Milk Factory,	John Jacobson, 414 N. State St.,	Chicago, Ill.
The Niles Creamery,	Niles Creamery Co.,	Niles.
Three Oaks Creamery,	Three Oaks Creamery Co.,	Three Oaks.

BRANCH COUNTY.

Union City Creamery Co.,	Hiram A. Lake, Secy.,	Union City.
Quincy Creamery Co.,	A. C. Shetterly,	Quincy.
Stringtown Cheese Factory (Algansee),	L. A. Downer,	Quincy.
Coldwater Creamery,	Mrs. W. C. Waite,	Coldwater.

CALHOUN COUNTY.

Burlington Creamery Co.,	George L. Matteson,	Burlington.
Battle Creek Sanitarium Creamery,	M. W. Wentworth, Mgr.,	Battle Creek.
Albion Butter Co.,	R. J. McCoy,	Albion.
Johnson Milk Co.,	Johnson Milk Co.,	Battle Creek.
F. E. Mellin Milk Depot,	F. E. Mellin, 15 E. Prairie Ave.,	Battle Creek.
Athens Creamery Co.,	J. J. Snyder, Mgr.,	Athens.
Milk Producers Co. Milk Depot,	Milk Producers Co.,	Battle Creek.
Tekonsha Creamery,	H. E. Taylor,	Tekonsha.
Homer Creamery,	Farmers' Dairy Exchange, Inc.,	Homer.
Raymond & Fagan Milk Depot,	Raymond & Fagan, Jefferson Ave.,	Battle Creek.
Marshall Creamery,	Marshall Creamery Co.,	Marshall.

CASS COUNTY.

Cassopolis Creamery Co.,	H. P. Thomas, Secy.,	Cassopolis.
Vandalia Creamery,	Vandalia Creamery Co.,	Vandalia.
Dowagiac Creamery & Butter Co.,	Jesse S. Green, Mgr.,	Dowagiac.
Marcellus Creamery Co.,	J. R. Munger, Mgr.,	Marcellus.
Jones Creamery,	Jones Creamery Co.,	Jones.

CHARLEVOIX COUNTY.

George Block Creamery,	George Block, 328 Bridge St.,	Charlevoix.
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CHIPPEWA COUNTY.

Rudyard Creamery,	Rudyard Dairy Ass'n.,	Rudyard.
W. H. Stribling Milk Depot,	W. H. Stribling, 419 Portage Ave.,	Sault Ste. Marie.
John W. Madigan Milk Depot,	John Madigan, 214 Sova St.,	Sault Ste. Marie.

CLARE COUNTY.

Farwell Creamery,	R. J. Powell,	Farwell.
Clare Creamery Co.,	J. M. Davis,	Clare.
Clare Creamery,	Michigan Creamery Co.,	Clare.

CLINTON COUNTY.

Westphalia Creamery Co.,	A. A. Bauer, Mgr.,	Westphalia.
The Clinton Butter Co.,	F. M. Spaulding, Mgr.,	St. Johns.
Maple Rapids Cheese Factory,	C. Erving Reist,	Maple Rapids.
Fowler Creamery,	Geller & Edinger,	Fowler.

DELTA COUNTY.

Schaffer Cheese Factory,	A. Derocher,	Schaffer.
Bark River Creamery,	Phillip Labre,	Bark River.
Van Bros. Dairy Co. Creamery,	Van Bros. Dairy Co.,	Escanaba.
Garden Creamery,	Garden Creamery Co.,	Garden.

DICKINSON COUNTY.

Best Bros. Creamery,	Best Bros.,	Iron Mountain.
Asselin Farm Creamery,	Asselin Estate,	Norway.

EATON COUNTY.

Eaton Rapids Creamery,	A. M. Smith & Co.,	Eaton Rapids.
Charlotte Creamery,	W. T. Leonard & Co.,	Norwood, N. Y.
Mulliken Creamery,	Mulliken Cooperative Cre. Co.,	Grand Ledge.

EMMET COUNTY.

Alanson Creamery Co., Inc.,	Chas. H. Reynier, Mgr.,	Alanson.
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GENESEE COUNTY.

Name.	Owner or Manager.	Postoffice.
Goodrich Dairy Ass'n. Creamery,	Goodrich Dairy Ass'n.,	Goodrich.
Vienna Cheese Factory Ass'n.,	Chas. Knickerbocker, Mgr.,	Clio.
State Road Cheese Factory,	O. M. Field, Mgr.,	Clio, R. F. D. No. 3.
Theford Cheese Co.,	L. J. Benjamin,	Clio.
Standard Butter Co. (Flushing),	H. A. Amerman, Mgr.,	Flushing.
Mt. Morris Cheese Factory,	T. W. Walker,	Mt. Morris.
Richards Cheese Factory,	Dick W. Richards, Mgr.,	Flint, No. 6.
F. C. Torrey Milk Depot,	F. C. Torrey,	Flint, 1214 Second St.

GLADWIN COUNTY.

Beaverton Butter Co. Creamery,	C. H. Keyworth, Mgr.,	Coleman.
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GOGEBIC COUNTY.

A. C. Buss Creamery.....	A. C. Buss,	Ironwood.
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GRAND TRAVERSE COUNTY.

Traverse City Creamery,	Wm. A. McCool,	Traverse City.
Traverse City Milk Depot,	C. F. Chase, 734 Webster St.,	Traverse City.
A. W. Wiedoeft Milk Depot	A. W. Wiedoeft, 443 Monroe St.,	Traverse City.

GRATIOT COUNTY.

Middleton Cheese Factory,	H. P. Fitzpatrick & Co.,	Middleton.
Ola Cheese Factory,	Peter J. Wolf & Son,	Pompeii.
Central Michigan Produce Co.,	Central Mich. Produce Co.,	Alma.
Middleton Cream Sta.,	J. H. Pennington & J. E. Love,	Middleton.
Stonebrook Bros., Cream Sta.,	Stonebrook Bros.	Middleton No. 2.

HILLSDALE COUNTY.

North Adams Creamery,	North Adams Creamery Co.,	North Adams.
North Wheatland Cheese Factory,	M. C. Dowd,	Addison.
Ransom Cheese Factory,	W. E. Cockin, Mgr.,	Waldron.
Waldron Cheese Factory,	W. E. Cockin, Mgr.,	Waldron.
Litchfield Dairy Ass'n.,	W. E. Sheldon, Mgr.,	Litchfield.
Hillsdale Elgin Creamery Co.,	F. M. Smith, Mgr.,	Hillsdale.
G. B. Elliott Cheese Factory,	G. B. Elliott,	Jonesville.
Church Cheese Factory,	Oaks & Douglass,	Pittsford, R. F. D. No. 30.
Somerset Cheese Factory,	Central Supply Co.,	Addison.
Reading Creamery,	W. T. Leonard & Co.,	Norwood, N. Y.

HOUGHTON COUNTY.

Chassell Creamery,	Chassell Creamery Co.,	Chassell.
Barsotti Bros. Milk Depot,	Barsotti Bros.,	Calumet.
Portage Lake Creamery,	Cooperative Co.,	Oskar.

HURON COUNTY.

Filion Creamery,	James Ireland & Son,	Filion.
Huron County Creamery Co. (Pigeon),	John Ulrich, Mgr.,	Pigeon.
Rice Bros. Butter & Cheese Factory,	S. B. Rice & E. J. Rice,	Elkton.
Uby Condensed Milk Factory,	Page Milk Co.,	Uby.
Ruth Creamery Co.,	John Wahla,	Ruth.
Elmhurst Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Kilmanagh Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Pinnebrog Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Pigeon Creamery,	Fred M. Warner Cheese Co.,	Farmington.

INGHAM COUNTY.

Williamston Cheese Factory,	H. J. Bivins,	Williamston.
Lansing Condensed Milk Factory,	Michigan Condensed Milk Co.,	44 Hudson St., New York.
G. M. Hall Milk Depot,	G. M. Hall, 405 Isaac St.,	Lansing.
Morrison Bros. Milk Depot,	Morrison Bros., 617 Madison St. W.	Lansing.
N. H. Winans & Sons Milk Depot,	N. H. Winans & Sons,	Lansing.
Mason Creamery Co.,	A. A. Howlett, Mgr.,	Mason.
Stockbridge Creamery,	H. J. Kiepert,	Stockbridge.
Leslie Butter Co.,	E. J. Kneibehler,	Leslie.
Bell Oak Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Lyndon Cheese Factory,	Lyndon Cheese Co.,	Stockbridge.
Island City Creamery,	J. W. Eaton, 506 Mich. Ave. E.,	Lansing.

IONIA COUNTY.

Lake Odessa Condensed Milk Factory,	F. A. Page, Mgr.,	Lake Odessa.
Ionias Creamery,	Hiram H. Darling,	Ionias.
Orleans Creamery,	Orleans Creamery Ass'n.,	Orleans.
Pewamo Creamery,	James Love Co.,	Pewamo.

IOSCO COUNTY.

Tawas Butter Co.,	E. J. McCartney, Mgr.,	Tawas City.
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IRON COUNTY.

Name.	Owner or Manager.	Postoffice.
Iron River Creamery,	A. C. Buss,	Iron River.

ISABELLA COUNTY.

J. F. Faulkner Milk Depot, Blanchard Creamery, Mt. Pleasant Condensed Milk Factory,	J. F. Faulkner, 814 S. Franklin St., H. J. Sass, Michigan Condensed Milk Co.,	Mt. Pleasant. Blanchard. 44 Hudson St., New York.
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JACKSON COUNTY.

Lakeside Elgin Butter Co. (Grass Lake), Parma Butter Co. Creamery, Brooklyn Creamery Co., Elmer Creamery, Cement City Skimming Station, Fowler Creamery, Jackson Condensed Milk Factory, Crystal Creamery Co., McCain & Sheridan Milk Depot, Clarks Lake Creamery,	J. M. Rohrer, Parma Butter Co., A. W. Brooks, Mgr., Elmer Bros., J. A. Fowler, J. A. Fowler, Michigan Condensed Milk Co., E. S. Wilcox, Mgr., McCain & Sheridan, E. Anderson,	Grass Lake. Parma. Brooklyn. Devereaux. Jackson. Jackson. 44 Hudson St., N. Y. Concord. Jackson, R. F. D. No. 5. Clarks Lake.
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KALAMAZOO COUNTY.

Riverside Creamery (Galesburg), Scotts Creamery, Vicksburg Creamery, Kalamazoo Creamery Co. Milk Depot, Michigan Butter Co. Creamery, Alamo Creamery Co., Climax Creamery, Island Creamery (Schoolcraft), H. H. Snyders Cream Station, Dairymans Milk Co.,	Burnham & Stafford, Archie R. Pierce, Bishop Creamery Co., H. W. Weeks, Mgr., H. W. Weeks, Mgr., H. W. Walker, Mgr., Arthur Gingell, McCreary & Erwine, H. H. Snyder, W. J. Kendall, Mgr., 221 E. Ran- son St.,	Galesburg. Scotts. Buchanan. Kalamazoo. Kalamazoo. Alamo. Climax. Schoolcraft. Climax. Kalamazoo.
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KENT COUNTY.

Byron Centre Creamery Co., C. J. Eberhard Milk Depot, Kent City Cheese Factory, Sparta Creamery, Aaron Schiedel Milk Depot,	L. J. O'Singor, Mgr., C. J. Eberhard, 1140 Wealthy St., Peterson & Carlson, P. C. Mossner, Aaron Schiedel,	Byron Centre. Grand Rapids. Kent City. Sparta. Sparta.
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LAPEER COUNTY.

Peoples Creamery (North Branch), Lum Creamery, Metamora Butter Co's. Creamery,	Thomas Stacey, McInally Bros., J. C. Weiskirch,	North Branch. Lum. Metamora.
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LEELANAU COUNTY.

Maple City Creamery, Northport Creamery,	L. L. Drake, Leelanau Township Farmers Club,	Maple City. Northport.
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LENAWEE COUNTY.

Riverside Cheese Factory, Blissfield Creamery Co., Onstead Cheese Factory, Cadmus Cheese Factory, Wolf Creek Cheese Factory, Macon Creamery Co., Inc., Tecumseh Butter Co., Hudson Condensed Milk Factory, Maple City Creamery, Rome Center Cheese Factory, Lime Creek Cheese Factory, Rollin Twp. Cheese Factory, Home Cheese Factory, Jasper Cheese Factory, Weston Cheese Factory, Munson Cheese Factory, South Dover Cheese Factory, Bimo Cheese Factory,	E. L. Baker, Mgr., E. C. Keeler, Mgr., L. E. Conner, C. H. Gamsey, Stukey & Cooley, G. Mills, Mgr., R. J. McCoy, Helvetia Milk Condensing Co., W. A. Barnaby, Fred M. Owen, F. A. Lester, Central Supply Co., Geo. B. Horton & Son, Geo. B. Horton & Son, Geo. B. Horton & Son, Geo. B. Horton & Son, Geo. B. Horton & Son, Geo. B. Horton & Son,	Adrian. Blissfield. Onsted. Cadmus. Adrian, No. 4. Tecumseh. Tecumseh. Highland, Ill. Adrian. Adrian. Hudson, No. 3. Addison. Fruit Ridge. Fruit Ridge. Fruit Ridge. Fruit Ridge. Fruit Ridge. Fruit Ridge.
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LIVINGSTON COUNTY.

Howell Condensed Milk Factory,	Michigan Condensed Milk Co.,	44 Hudson St., New York.
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MACOMB COUNTY.

New Baltimore Creamery Co., Cady Milk Depot, Mt. Clemens Milk Depot, Utica Milk Depot,	C. P. Marcero, Mgr., Detroit Creamery Co., Detroit Creamery Co., Detroit Creamery Co.,	New Baltimore. Detroit. Detroit. Detroit.
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MACOMB COUNTY.—Continued.

Name.	Owner or Manager.	Postoffice.
Gatz Creamery (Mt. Clemens),	John Gatz Co.,	Mt. Clemens.
Macomb Skimming Station,	Gatz Creamery Co.,	Mt. Clemens.
Blue Ribbon Creamery (Macomb),	W. H. Chapman & Sons,	New Baltimore.
Chesterfield Creamery Co. (Chesterfield),	C. F. Jordan, Mgr.,	Chesterfield.
Waldenburg Skimming Station,	Chesterfield Creamery Co.,	Mt. Clemens.
Meade Skimming Station,	Chesterfield Creamery Co.,	Mt. Clemens.
Mt. Clemens Skimming Station,	Chesterfield Creamery Co.,	Mt. Clemens.
Richmond Creamery,	Wm. H. A. Zentgrebe,	Richmond.
Utica Cooperative Creamery Ass'n.,	C. H. Firman, Secy.,	Utica.
Disco Skimming Station,	Utica Cooperative Cre. Ass'n.,	Utica.
Waldenburg Skimming Station,	Utica Cooperative Cre. Ass'n.,	Utica.
Romeo Elgin Creamery Co.,	L. B. Crawford, Mgr.,	Romeo.
Lenox Twp. Skimming Station,	New Haven Elgin Cre. Co.,	New Haven.
Rav Center Skimming Station,	New Haven Elgin Cre. Co.,	New Haven.
New Haven Elgin Creamery,	New Haven Elgin Cre. Co.,	New Haven.

MARQUETTE COUNTY.

Skandia Creamery Co.,	Robert Shaw, Mgr.,	Skandia.
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MASON COUNTY.

Alpha Creamery (Scottville),	A. Kehlet,	Ludington.
Wiley Cooperative Creamery Co.,	D. E. Sherburn, Mgr.,	Scottville, R. F. D. No. 2.

MECOSTA COUNTY.

Wheatland Twp. Creamery,	Remus Cooperative Ass'n.,	Remus.
Barryton Creamery Co.,	E. M. Lamos, Mgr.,	Barryton.

MENOMINEE COUNTY.

Daggett Creamery,	Daggett Creamery Co.,	Daggett.
Carney Cheese Factory,	J. H. Hannon,	Carney.
Ingalls Creamery,	Ira Carley,	Ingalls.
C. I. Cook Creamery,	C. I. Cook,	Menominee.
Perronville Cheese Factory,	M. Perron,	Perronville.
Stephenson Cheese Factory,	W. Landree,	Stephenson.
Indian Town Cheese Factory,	Chas. Elliott & Son,	Bark River.
Nadeau Creamery,	Nadeau Brothers,	Nadeau.
I. X. L. Creamery (Hermansville),	Thos. H. Peets, Mgr.,	Hermansville.
Spalding Cheese Factory,	Frank Beatson,	Spalding.
Nadeau Cheese Factory,	S. J. Matheys,	Nadeau.
Van Bros. Dairy Co. Milk Depot,	Van Bros. Dairy Co.,	Escanaba.

MIDLAND COUNTY.

Farmers Dairy Ass'n. Creamery,	F. L. Ferguson, Mgr.,	Coleman.
Coleman Creamery Co.,	C. H. Keyworth, Mgr.,	Coleman.

MISSAUKEE COUNTY.

Lucas Farmers Creamery Co.,	J. C. Taylor, Secy.,	Lucas.
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MONROE COUNTY.

Excelsior Creamery Co. (Ida),	W. G. Hoffman,	Ida.
Strasburg Skimming Station,	W. G. Hoffman,	Ida.
Lulu Cheese & Butter Co. (Ida Twp.),	J. Lafine, Mgr.,	Lulu.
Azalia Condensed Milk Factory,	Toledo Dairy,	Toledo, Ohio.
Gert Cheese Factory,	Gilhouse & Emerson,	Riga.
Monroe Creamery,	Monroe Butter & Cheese Factory,	Monroe.
Frenchtown Skimming Station,	Monroe Butter & Cheese Factory,	Monroe.
LaSalle Skimming Station,	Monroe Butter & Cheese Factory,	Monroe.
Hazelwood Creamery,	R. G. Peters,	Petersburg.
Rea Cream Receiving Station,	Medina Co. Creamery Company,	Detroit.
Maybee Cream Receiving Station,	Medina Co. Creamery Company,	Detroit.
Grape Cheese Factory,	D. A. Jenkins,	Monroe.
So. Rockwood Butter & Cheese Co.,	J. W. Harris, Mgr.,	South Rockwood.
Strasburg Cheese Co.,	Anton Geiger, Mgr.,	Ida.

MONTCALM COUNTY.

Butternut Cheese Factory,	J. M. Fitzpatrick,	Butternut.
Vickeryville Cheese Factory,	M. C. Johnson,	Vickeryville.
Carson City Cheese Factory,	F. H. Miner,	Carson City.
McBride Creamery,	McBride Creamery Co.,	McBride.
G. E. Cornell Cream Station,	G. E. Cornell,	Six Lakes.
Lakeview Creamery,	H. A. Black,	Lakeview.

MUSKEGON COUNTY.

Cedar Creek Dairy Milk Depot,	A. T. Dalson & Geo. Nielsen,	Muskegon.
Dalton Creamery,	E. J. Peterson,	Muskegon.
Holten Creamery,	Holten Cre. Co.,	Holten.
Peerless Creamery,	Campbell & Caulfield,	
	22-24 W. Clay Ave.,	Muskegon.

NEWAYGO COUNTY.

Name.	Owner or Manager.	Postoffice.
Grant Creamery Co.,	William Carter, Mgr.,	Grant.
Beaver Valley Creamery Co.,	George L. Bird, Mgr.,	Bitley, R. F. D. No. 1.
Bishop Creamery Co. (Garfield Twp.),	John Dobben, Mgr.,	Fremont, No. 5.
Rouge River Cre. Co. (Grant Twp.),	J. Vander Molen, Mgr.,	Grant, No. 3.
Reeman Cooperative Creamery Co.,	Engbert Visscher, Mgr.,	Fremont, No. 3.
Fremont Creamery Co.,	H. Rozema, Mgr.,	Fremont.

OAKLAND COUNTY.

Royal Oak Milk Depot,	Peter Backer,	Royal Oak.
North Farmington Cheese Factory,	Mark B. Armstrong,	North Farmington.
Rochester Creamery,	Rochester Creamery Co.,	Rochester.
Yates Milk Depot,	Detroit Creamery Co.,	Detroit.
South Lyons Milk Depot,	Detroit Creamery Co.,	Detroit.
Pontiac Cooperative Creamery Co.,	Frank C. King, Mgr.,	Pontiac.
Novi Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Powers Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Franklin Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
Farmington Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.

OCEANA COUNTY.

New Era Creamery Co.,	George C. Myers, Mgr.,	Shelby, No. 4.
Shelby Dairy Co. Creamery,	Shelby Dairy Co.,	Shelby.

ONTONAGON COUNTY.

Paynesville Milk Depot,	Benstrom Nystie,	Paynesville.
Ontonagon Creamery,	Ontonagon Creamery Co.,	Ontonagon.
Ontonagon Valley Creamery Co. (Ewen),	Earl J. Hatfield, Mgr.,	Ewen.

OSCEOLA COUNTY.

Evart Creamery,	Geo. A. Glerum,	Evart.
Reed City Creamery,	E. M. Gingrich,	Reed City.

OTTAWA COUNTY.

Agnew Creamery,	L. Wallenzin,	Grand Haven, No. 2.
Allendale Creamery Co.,	Mrs. H. T. Pierson, Mgr.,	Allendale.
Banner Creamery Co.,	H. J. Steigenga, Mgr.,	Zeeland, No. 5.
Crisp Creamery,	Crisp Creamery Co.,	Holland, No. 2.
Zeeland Cheese & Butter Factory,	Phenix Cheese Co.,	Zeeland.
Harlem Creamery,	Phoenix Cheese Co.,	Zeeland.
Blendon Twp. Skimming Station,	Phoenix Cheese Co.,	Zeeland.
Vriesland Creamery Co.,	Henry Rock, Mgr.,	Zeeland.
Jamestown Cooperative Creamery,	J. Nyenhuis, Mgr.,	Hudsonville, No. 3.
Jamestown Cooperative Co. Skim. Sta.,	J. Nyenhuis, Mgr.,	Hudsonville, No. 3.
Beaverdam Cooperative Creamery Co.,	D. Bekins, Mgr.,	Hudsonville, No. 1.
Interurban Creamery,	Interurban Creamery Co.,	Hudsonville, No. 4.
Holland Crystal Creamery,	C. J. Lokker & Co.,	Holland.
Holland Twp. Skimming Station,	C. J. Lokker & Co.,	Holland.

SAGINAW COUNTY.

Frankenmuth Cheese Factory,	L. Hubinger, Mgr.,	Frankenmuth.
Star Cheese Factory,	John Schellhas,	Frankenmuth.
Birch Run Cheese Co.,	M. I. Totten, Mgr.,	Birch Run.
Kochville Skimming Station,	L. H. Walker,	Bay City.
C. H. Parker Milk Depot,	Parker Dairy Co., 228 N. Warren Ave.,	Saginaw.
Union Cheese Mfg. Co.,	Union Cheese Mfg. Co.,	Frankenmuth.
Blackmar Cheese Co.,	W. A. Judd, Mgr.,	Fosters, No. 1.
Maple Grove Elgin Butter Co.,	J. A. Bueche, Mgr.,	New Lathrop.
Burt Creamery,	J. C. Malone,	Burt.
Frankentrost Creamery,	Mathias Janson,	Saginaw, No. 4.
Michigan Creamery Co. (Saginaw),	R. E. Higgins, Mgr.,	Saginaw.
Wilson Cheese Factory,	F. L. Kent, Mgr.,	Birch Run.
Gera Creamery,	Chas. F. Hack,	Gera.
Merrill Creamery,	P. O'Toole,	Merrill.
Buena Vista Cheese Factory,	Buena Vista Cheese Co.,	Saginaw, No. 4.

SANILAC COUNTY.

Greenleaf Creamery Co.,	A. McCallum, Mgr.,	Cass City, No. 1.
Croswell Creamery Co.,	William Smith, Mgr.,	Croswell.
Minden City Creamery,	L. H. Riedel, Lessee,	Minden City.
Red Star Creamery Ass'n.,	H. Barslund, Mgr.,	Marlette, No. 7.
Union Creamery Co. (Deckerville),	Frank S. Burgess, Mgr.,	Deckerville, No. 4.
Equity Creamery Co. (Brown City),	Gleason & Lansing,	Buffal, N. Y.
Equity Creamery Co. (Marlette),	Gleason & Lansing,	Buffalo, N. Y.
Downington Cheese Factory,	H. W. Muir,	Downington.
Roseburg Creamery Co.,	N. Donnenworth, Secy.,	Yale, No. 5.
Sandusky Creamery,	W. T. Leonard,	Norwood, N. Y.
Applegate Creamery,	W. T. Leonard,	Norwood, N. Y.

SHIAWASSEE COUNTY.

Name.	Owner or Manager.	Postoffice.
Carland Cheese Co.,	D. D. Curtis, Mgr.,	Carland.
Owosso Milk Depot,	Detroit Creamery Co.,	Detroit.
Morrice Creamery,	Bishop Creamery Co.,	Buchanan.
O. C. Launstein Milk Depot,	O. C. Launstein, 903 Adams St.,	Owosso.
Owosso Condensed & Dry Milk Factory,	American Milk Co., 322-24	W. Kinzie St., Chicago, Ill.
Durand Creamery,	Van Slyke & Eldridge,	Durand.

ST. CLAIR COUNTY.

Maple Grove Cheese Factory,	Simon Babel & Co.,	Marine City, No. 3.
Review Cheese Factory,	John Brenner,	Marine City, No. 3.
Germania Cheese Factory (Minden City),	Jos. Zobl, Mgr.,	Marine City.
Pine Grove Cheese Co.,	Andrew Hahn, Mgr.,	Marine City, No. 3.
Burtchville Butter Factory,	L. D. Cole,	Blaine.
Capac Cream Station,	Medina County Creamery Co.,	Detroit, 74 W. Congress St.
Petersville Skimming Station,	Chesterfield Creamery Co.,	Mt. Clemens.
Meyers Skimming Station (Casco Twp.),	Chesterfield Creamery Co.,	Mt. Clemens.
Adair Skimming Station,	Charles Zentgrebe,	Lenox.
Casco Creamery,	Charles Zentgrebe,	Casco, No. 1.
Port Huron Creamery,	Port Huron Creamery Co.,	Port Huron.
Avoca Butter Co.,	J. A. Batten,	Avoca.
St. Clair Creamery Co.,	Chas. H. Otter & J. F. Ruff,	St. Clair.

ST. JOSEPH COUNTY.

Colon Creamery Co.,	D. L. Akey, Mgr.,	Colon.
Constantine Creamery,	Constantine Creamery Co.,	Constantine.

TUSCOLA COUNTY.

The Kingston Creamery Co.,	J. H. Holmes & L. A. Maynard,	Kingston.
Arbela Cheese Co.,	J. A. Pickett, Mgr.,	Millington.
Unionville Creamery Co., Ltd.,	C. H. Geyer,	Unionville.
Tuscola Cheese Mfg. Co.,	G. W. Dimond, Mgr.,	Tuscola.
Fairgrove Creamery,	F. E. & G. N. Findlay,	Fairgrove.
Thumb Creamery (Caro),	W. H. Bechtel,	Caro.
Thumb Creamery (Cass City),	W. H. Bechtel,	Caro.
Stone Road Cheese Factory,	Stone Road Cheese Co.,	Millington, No. 1.
Denmark Twp. Station,	Warner Creamery Co.,	Pigeon.
Vassar Condensed Milk Factory & Cre.,	Vassar Milk Condensing Co.,	34-40 Chope Place, Detroit.
Mayville Creamery Co.,	J. B. Foster, Mgr.,	Mayville.
Gagetown Cheese Factory,	Fred M. Warner Cheese Co.,	Farmington.
A. P. Foltz Cheese Factory,	A. P. Foltz,	Akron.
Silverwood Creamery & Cheese Factory,	A. L. Rice,	Silverwood.
Fairgrove Cream Station,	Butler & Albertson,	Fairgrove.

VAN BUREN COUNTY.

Decatur Creamery Co.,	M. S. Thomas, Mgr.,	Decatur.
Almena Creamery,	C. A. Finch, Lessee,	Paw Paw.
Gobleville Cre. Co. (Pinegrove Twp.),	C. D. Morgan, Mgr.,	Gobleville.
Lawrence Cooperative Creamery,	H. W. Chapman, Secy.,	Lawrence.
Bloomingtondale Creamery,	Chas. Linton,	Bloomingtondale.
Berlamont Skimming Station,	Chas. Linton,	Bloomingtondale.
Base Line Cheese Factory,	L. Reid,	Bloomingtondale.
Glendale Cooperative Creamery Co.,	J. M. Scamehorn, Mgr.,	Bloomingtondale.

WASHTENAW COUNTY.

Brookside Creamery (Ann Arbor),	Philip O'Hara,	Ann Arbor.
Augusta Twp. Creamery,	F. J. Fletcher & Co.	Willis.
Saline Creamery Co.,	E. A. Hauser,	Saline.
Ypsilanti Creamery,	Ypsilanti Dairy Ass'n.,	Ypsilanti.
Stony Creek Skimming Station,	Ypsilanti Dairy Ass'n.,	Ypsilanti.
Milan Cream Receiving Station,	Medina County Creamery Co.,	Detroit.
Wurster Bros. Milk Depot,	Wurster Bros.,	Ann Arbor.
Chelsea Cream Station,	J. S. Cummings,	Chelsea.
Riverside Creamery,	W. F. Allen,	Milan.
Manchester Creamery Co.,	R. G. Sortor, Mgr.,	Manchester.
Worden Cooperative Creamery Ass'n.,	A. C. Curtis, Mgr.,	Plymouth, No. 1.
Salem Milk Depot,	Detroit Creamery Co.,	Detroit.
Dixboro Dairy Ass'n.,	Ed. Wilbur,	Ann Arbor, No. 8.

WAYNE COUNTY.

S. W. Johnston Milk Depot (Livonia Twp)	Elmer Dohany, Mgr.,	Farmington.
Dearborn Village Milk Depot,	Tony Schlaf,	Dearborn.
Belleville Creamery,	Van Buren Creamery Co.,	Belleville.
Weiss Creamery,	John H. Weiss,	Detroit, 215 Baldwin Ave.
Cherry Hill Skimming Station,	Ypsilanti Dairy Ass'n.,	Ypsilanti.
Elm Milk Depot,	Detroit Creamery Co.,	Detroit.
Canton Milk Depot,	Detroit Creamery Co.,	Detroit.
Flat Rock Milk Depot,	Detroit Creamery Co.,	Detroit.
Stark Milk Depot,	Detroit Creamery Co.,	Detroit.
Inkster Milk Depot,	Detroit Creamery Co.,	Detroit.

WAYNE COUNTY.—Continued.

Name.	Owner or Manager.	Postoffice.
Perrinsville Milk Depot,	Detroit Creamery Co.,	Detroit.
Holland Milk Depot,	Detroit Creamery Co.,	Detroit.
Hand Milk Depot,	Detroit Creamery Co.,	Detroit.
Preston Milk Depot,	Detroit Creamery Co.,	Detroit.
Plymouth Milk Depot,	Detroit Creamery Co.,	Detroit.
Detroit Creamery,	Detroit Creamery Co.,	Detroit.
Highland Park Creamery,	Geo. D. Brown, 30 Grand Ave. W.,	Highland Park.
Johnson Creamery,	Lyman P. Johnson,	Wyandotte.
Anthony Lazarowicz Milk Depot,	Anthony Lazarowicz, 1039 Jos. Campau Ave.,	Detroit.
Scott Milk Depot,	Thomas Scott, 364 Greenwood Ave	Detroit.
Baldwin Creamery,	William J. Mutton, 886 Baldwin Ave.,	Detroit.
Frank R. Smith Milk Depot,	Frank R. Smith, 83 Melrose Ave.,	Detroit.
C. J. Risdon Milk Depot,	C. J. Risdon, 838 Milwaukee Ave.,	Detroit.
Philip Gabel Milk Depot,	Philip Gabel, 814 Oakland Ave.,	Detroit.
J. R. Smith Milk Depot,	J. R. Smith, 232 Milwaukee Ave.,	Detroit.
Frank G. Kruger Cre. & Milk Depot,	Frank G. Kruger, 358 Antietam St.,	Detroit.
C. Kransmann Milk Depot,	Carl Kransmann, 916 St. Aubin Ave.,	Detroit.
West Sumpter Creamery Ass'n.,	L. Tabor, Mgr.,	Belleville.
C. L. Bossardet Milk Depot,	C. L. Bossardet, 1227 Wabash Ave.	Detroit.
Henry Schwartz Milk Depot,	Henry Schwartz,	Wyandotte.
Roy & Clinton Creamery,	Roy & Clinton,	147 Pierce St., Detroit.
S. H. Wilbur Milk Depot,	S. H. Wilbur,	Wayne.
Warren Ave. Milk Station,	John Schlaff,	277 Tillman Ave., Detroit.
Red Mill Milk Station,	John Schlaff,	277 Tillman Ave., Detroit.
Greenfield Milk Station,	John Schlaff,	277 Tillman Ave., Detroit.
Bell Branch Milk Station,	John Schlaff,	277 Tillman Ave., Detroit.
Gilt Edge Milk Depot,	Frank S. Bradley,	Farmington.
Chas. Swegles Milk Depot,	Charles Swegles,	Inkster.
E. M. Starkweather Milk Depot,	E. M. Starkweather,	Northville.
Louis C. Fritz Milk Depot,	Louis C. Fritz,	182 Arndt St., Detroit.
Wm. Dickinson Milk Depot,	Wm. Dickinson, Jr.,	1467 Jos Campau Ave., Detroit.

LAWS AND DECISIONS.

LAWS OF MICHIGAN

RELATIVE TO

INSPECTION AND ADULTERATION OF FOODS AND DRUGS.

POWERS AND DUTIES OF THE COMMISSIONER.

AN ACT to provide for the appointment of a Dairy and Food Commissioner, and to define his powers and duties and fix his compensation.

(Act No. 211, Public Acts, 1893.)

The People of the State of Michigan enact:

1. (C. L., 4973) Section 1. That within thirty days after this act shall take effect, the Governor by and with the consent of the Senate, shall appoint a suitable person to be Dairy and Food Commissioner, which office is hereby created, and which commissioner so appointed shall hold his office until the first day of January, one thousand eight hundred and ninety-five, and until his successor is appointed and qualified. At the next regular session of the legislature and every two years thereafter, the Governor, by and with the advice and consent of the Senate, shall appoint a Dairy and Food Commissioner, who shall hold his office for the term of two years from the first day of January in the year of his appointment and until his successor is appointed and qualified.

2. (C. L., 4974). Sec. 2. The governor shall have power to remove such commissioner at any time in his discretion; but the reasons for such removal shall be laid before the Senate at the next regular or special session of the legislature thereafter, and in case of a vacancy in the office of commissioner from any cause, the Governor may appoint another person to fill the same.

3. (C. L., 4975) Sec. 3. Before entering upon the duties of his office, the person so appointed shall make, subscribe, and file in the office of the Secretary of State, an oath of office in the form prescribed by section one of article eighteen of the constitution of this State, and shall enter into bonds with the people of the State of Michigan in the sum of ten thousand dollars, with sureties to be approved by the Governor, conditioned for the faithful performance of his duties.

4. (C. L., 4976) Sec. 4. Said commissioner shall receive an annual salary of two thousand dollars. The said commissioner is hereby authorized and empowered, by and with the advice and consent of the Governor, to appoint a deputy commissioner. The salary of the deputy commissioner shall be fifteen hundred dollars per annum. The said commissioner may also appoint eight regular inspectors, who shall re-

ceive an annual salary not to exceed one thousand dollars per year, and such other special inspectors as the proper performance of the duties of the office may require, which special inspectors shall be paid not to exceed three dollars per day for the time actually employed: Provided, That the amount paid such special inspectors any one fiscal year shall not exceed six thousand dollars. The persons so appointed shall have power to administer oaths in all matters relative to the dairy and food laws and shall take and subscribe the constitutional oath of office and file the same in the office of the Secretary of State; and they shall hold office during the pleasure of the commissioner. The inspectors shall have the same right of access to the places to be inspected as the said commissioner or his deputy. The commissioner shall appoint such clerks as he may deem necessary for the transaction of the business of his office. The salaries and expenses authorized by this section shall be for the unexpired part of the fiscal year ending June thirty, nineteen hundred five, and each fiscal year thereafter. Said salaries are to be paid monthly on the warrant of the Auditor General. The actual and necessary expenses of the commissioner, deputy and inspectors, in the performance of their official duties, shall be audited by the State Board of Auditors and paid upon the warrant of the Auditor General. Such compensation and expenses shall be certified, audited and paid in the same manner as salaries and expenses paid similar officers. The deputy commissioner and inspectors shall enter into bonds with the people of the State of Michigan in the sum of five thousand dollars each, with sureties to be approved by the commissioner, conditioned for the faithful performance of their respective duties. The Board of State Auditors shall provide office room, and the necessary furniture and fixtures and the necessary stationery, supplies and printing for the conducting of the business of said commissioner, on his application to said board therefor. Said office shall be and remain in the city of Lansing.

[Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 186, P. A. 1901. Am. by Act No. 230, P. A. 1903. Am. by Act No. 12, P. A. 1905.]

5. (C. L., 4977) Sec. 5. The commissioner, by and with the consent of the Governor, shall appoint a suitable and competent person as State Analyst, who shall be a practical analytical chemist. The commissioner, in like manner, may appoint an assistant chemist. Before entering upon the duties of their offices, the analyst and assistant chemist shall take, subscribe and file in the office of the Secretary of State the constitutional oath of office. Their term of office shall continue during the pleasure of the commissioner. The Board of State Auditors shall provide a room in connection with the Dairy and Food Commissioner for the laboratory of the State analyst and his assistant, and the necessary furniture and fixtures therefor. In case of the absence or inability of the State Analyst or his assistant to perform his duty, the commissioner may appoint some competent person to perform the same temporarily, which person shall take, subscribe and file the constitutional oath of office. The salaries and expenses authorized by this section shall be for the unexpired part of the fiscal year ending June thirty, nineteen hundred five, and each fiscal year thereafter, said salaries to be payable monthly on the warrant of the Auditor General. The salary of the chemist shall be not to exceed

two thousand dollars; the salary of the assistant chemist shall be not to exceed twelve hundred dollars. The actual and necessary expenses of the chemist and the assistant chemist, in the performance of their official duties, shall be audited by the Board of State Auditors, and paid upon the warrant of the Auditor General. Such an amount as is found to be necessary in the proper performance of the work of the analyst may be expended for chemical supplies. Such compensations, expenses and supplies shall be certified, audited and paid in the same manner as the salaries, expenses and supplies of similar officers.

[Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 186, P. A. 1901. Am. by Act No. 230, P. A. 1903. Am. by Act No. 12, P. A. 1905.]

6. (C. L., 4978) Sec. 6. It shall be the duty of the Dairy and Food Commissioner to carefully inquire into the dairy and food and drink products and the several articles which are foods or drinks, or the necessary constituents of foods or drink, which are manufactured or sold or exposed or offered for sale in this State, and he may, in a lawful manner, procure samples of the same and direct the State Analyst to make due and careful examination of the same, and report to the commissioner the result of the analysis of all and any of such food and drink products or dairy products as are adulterated, impure or unwholesome in contravention of the laws of this State; and it shall be the duty of the commissioner to make a complaint against the manufacturer or vendor thereof in the proper county and furnish all evidence thereof, to obtain a conviction of the offense charged. The Dairy and Food Commissioner, or his deputy, or any person appointed by him for that purpose may make complaint and cause proceedings to be commenced against any person for the enforcement of any of the laws relative to adulterated, impure or unwholesome food or drink, and in such case he shall not be obliged to furnish security for costs and shall have power, in the performance of his duties, to enter into any creamery, factory, store, salesroom, drug store, or laboratory, or place where he has reason to believe food or drink is made, stored, sold or offered for sale and open any cask, tub, jar, bottle or package containing, or supposed to contain, any article of food or drink and examine or cause to be examined the contents thereof, and take therefrom samples for analysis. The person making such inspection shall take such sample of such article or product in the presence of at least one witness, and he shall in the presence of said witness, mark or seal such sample and shall tender at the time of taking to the manufacturer or vendor of such product, or to the person having the custody of the same, the value thereof, and a statement in writing for the taking of such sample. Whenever it is determined by the Dairy and Food Commissioner, his deputy or inspectors, that filthy, or unsanitary conditions exist or are permitted to exist in the operation of any bakery, confectionery, or ice cream plant, or in any place where any food or drink products are manufactured, stored, deposited or sold for any purpose whatever, the proprietor or proprietors, owner or owners, of such bakery, confectionery or ice cream plant, or any person or persons, owning or operating any plant where any food or drink products are manufactured, stored, deposited or sold, shall be first notified and warned by the commissioner, his deputy or inspectors to place such bakery, confection-

ery or ice cream plant, or any place where any food or drink products are manufactured, stored, deposited or sold in a sanitary condition within a reasonable length of time; and any person or persons owning and operating any bakery, confectionery or ice cream plant or any place where any food or drink products are manufactured, stored, deposited or sold, failing to obey such notice and warning, shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not less than twenty-five dollars nor more than three hundred dollars and costs of prosecution, or imprisonment in the county jail not to exceed ninety days, or until such fine and costs are paid, or both fine and imprisonment at the discretion of the court.

[Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1887. Am. by Act No. 268, P. A. 1899. Am. by Act No. 12, P. A. 1905.]

7. (C. L., 4979) Sec. 7. The commissioner, his deputy or any person by said commissioner duly appointed for that purpose, is authorized at all times to seize and take possession of any and all food and dairy products, substitutes therefor, or imitation thereof kept for sale, exposed for sale or held in possession or under the control of any person which in the opinion of the said commissioner, or his deputy or such person by him duly appointed, shall be contrary to the provisions of this act or other laws which now exist or which may be hereafter enacted.

First, The person so making such seizure as aforesaid, shall take from such goods as seized a sample for the purpose of analysis and shall cause the remainder thereof to be boxed and sealed and shall leave the same in the possession of the person from whom they were seized, subject to such disposition as shall hereafter be made thereof according to the provisions of this act.

Second, The person so making such seizure, shall forward the sample so taken to the State Analyst for analysis, who shall make an analysis of the same and shall certify the results of such analysis, which certificate shall be prima facie evidence of the fact or facts therein certified to in any court where the same may be offered in evidence.

Third, If upon such analysis it shall appear that said food or dairy products are adulterated, substitutes or imitations within the meaning of this act, said commissioner, or his deputy or any person by him duly authorized may make complaint before any justice of the peace or police justice having jurisdiction in the city, village or township where such goods were seized, and thereupon said justice of the peace shall issue his summons to the person from whom said goods were seized, directing him to appear not less than six nor more than twelve days from the date of the issuing of said summons and show cause why said goods should not be condemned and disposed of. If the said person from whom said goods were seized cannot be found said summons shall be served upon the person then in possession of the goods. The said summons shall be served at least six days before the time of appearance mentioned therein. If the person from whom said goods were seized cannot be found, and no one can be found in possession of said goods, and the defendants shall not appear on the return day, then said justice of the peace shall proceed in said cause in the same manner provided by law where a writ of attachment is returned not personally served upon any

of the defendants and none of the defendants shall appear upon the return day.

Fourth, Unless cause to the contrary thereof is shown, or if said goods shall be found upon trial to be in violation of any of the provisions of this act or other laws which now exist or which may be hereafter enacted, it shall be the duty of said justice of the peace or police justice to render judgment that said seized property be forfeited to the State of Michigan, and that the said goods be destroyed or sold by the said commissioner for any purpose other than to be used for food. The mode of procedure before said justice shall be the same, as near as may be as in civil proceedings before justices of the peace. Either parties may appeal to the circuit court as appeals are taken from justices' courts, but it shall not be necessary for the people to give any appeal bond.

Fifth, The proceeds arising from any such sale shall be paid into the State treasury and credited to the general fund: Provided, That if the owner or party claiming the property or goods so declared forfeited can produce and prove a written guarantee of purity, signed by the wholesaler, jobber, manufacturer or other party from whom said articles were purchased, then the proceeds of the sale of such articles, over and above the cost of seizure, forfeiture, and sale, shall be paid over to such owner or claimant to reimburse him, to the extent of such surplus, for his actual loss resulting from such seizure and forfeiture, as shown by the invoice.

Sixth, It shall be the duty of each prosecuting attorney when called upon by said commissioners or by any person by him authorized as aforesaid, to render any legal assistance in his power in proceedings under the provisions of this act, or any subsequent act relative to the adulteration of food, for the sale of impure or unwholesome food or food products.

[Am. by Act No. 245, P. A. 1895. Am. by Act No. 268, P. A. 1899. Am. by Act No. 230, P. A. 1903.]

8. (C. L., 4980) Sec. 8. It shall be unlawful for the State Analyst, while he holds his office to furnish to any individual, firm or corporation, any certificate as to the purity or excellence of any article manufactured or sold by them to be used as food or in the preparation of food.

9. (C. L., 4981) Sec. 9. The commissioner shall make an annual report to the Governor on or before the first day of July in each year, and which shall be printed and published on or before the first day of September next thereafter, which report shall cover the doings of his office for the preceding fiscal year, which shall show, among other things, the number of manufactories and other places inspected and by whom, the number of specimens of food articles analyzed, and the State Analyst's report upon each one; the number of complaints entered against persons for violation of the laws relative to the adulteration of food, the number of convictions had, and the amount of fines imposed therefor, together with such recommendations relative to the statutes in force as his experience may justify. The commissioner shall also prepare, print and distribute to all the papers of the State, and to such persons as may be interested or may apply therefor, a monthly bulletin, in suitable paper covers, containing results of inspections, the results of analyses made by the State Analyst, with popular explanation of

county jail, not to exceed ninety days or until such fine and costs are paid, or both fine and imprisonment at the discretion of the court.

[Added by Act No. 12, P. A. 1905.]

16. Sec. 16. It shall be the duty of the proprietor or proprietors of every skimming station, creamery, cheese factory, condensed milk factory or milk depot, in the State where milk or cream is received by purchase or otherwise from three or more persons, to register with the Dairy and Food Commissioner on or before April first of each year, upon blanks furnished by said official, the location of such skimming station, creamery, cheese factory, condensed milk factory or milk depot, and the name of its owner or owners and manager. And it shall be the duty of the proprietor or proprietors of every skimming station, creamery, cheese factory, condensed milk factory or milk depot in this State, where milk or cream is received by purchase or otherwise from three or more persons, to file a report with the Dairy and Food Commissioner, said report to be made on or before April first of each year, upon blanks furnished by said official, and to show the amount of milk or cream received by said skimming station, creamery, cheese factory, condensed milk factory or milk depot during the year ending December thirty-first preceding; and said report shall show the amount of butter, cheese or condensed milk manufactured during the year, together with a list of the names and postoffice addresses of the patrons of said skimming station, creamery, cheese factory, condensed milk factory or milk depot. Every skimming station, creamery, cheese factory, condensed milk factory or milk depot, so registering and so reporting, shall pay to the office of the State Dairy and Food Commissioner an annual registration fee of five dollars, to be paid at the time of such registration. The money so collected by the Dairy and Food Commissioner shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the annual appropriation therefor.

[Added by Act No. 12, P. A. 1905.]

17. Sec. 17. Any person, persons or corporation who shall sell milk or cream from a wagon or other conveyance, depot or store, or who shall sell or deliver milk or cream to a hotel, restaurant, boarding house or any public place, shall be considered a milk dealer; and every milk dealer who shall sell milk or cream from a wagon or other conveyance, depot or store, or who shall sell, or deliver milk or cream to a hotel, restaurant, boarding house or any public place in any city, town or village of this State, must first obtain a license from the Dairy and Food Commissioner to sell such milk or cream. A license shall be required for each wagon or other conveyance, depot or store. Each dealer shall pay to the Dairy and Food Commissioner a license fee of one dollar for each license so granted, which license must be obtained on or before the first day of July of each year. The moneys received by the Dairy and Food Commissioner, in payment of such licenses, shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner in addition to the annual appropriation. All licenses shall be used only in the name of the owner of the wagon, depot or store, and shall, for the purpose of this act, be prima facie evidence of ownership. No license shall be sold, assigned, or transferred. Each license

shall record the name, residence, place of business, number of wagons, depots or stores used (where more than one is employed) and the number of the license. Whoever violates any of the provisions of this section, in so far as relates to registration and the securing of licenses, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine not less than five dollars, nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

[Added by Act No. 12, P. A. 1905.]

18. Sec. 18. Any manufacturer, company, person or persons who shall sell, offer or expose for sale or for distribution, in this State, any concentrated commercial feeding stuff used for feeding live stock, shall furnish with each car, or other amounts shipped in bulk, and shall affix to every package of such feeding stuff, in a conspicuous place, on the outside thereof, a plainly printed statement, clearly and truly certifying the number of net pounds in the car or package sold or offered for sale, the name or trade-mark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis, stating the percentages it contains of crude protein, crude fibre, nitrogen-free extract and ether extract, all constituents to be determined by the methods adopted by the association of official agricultural chemists. Whenever any feeding stuff is sold at retail, in bulk or in packages belonging to the purchaser, the agent or dealer shall furnish to him a certified copy of the chemical analysis named in this section.

(a) The term concentrated commercial feeding stuffs as used in this act shall include linseed meal, cotton seed meal, pea meals, cocoanut meals, gluten meals, oil meals of all kinds, gluten feeds, maize feeds, starch feeds, mixed sugar feeds, hominy feeds, rice meals, oat feeds, corn and oat feeds, meat meals, dried blood, clover meals, mixed feeds of all kinds, slaughter house waste products; also all condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended for feeding to domestic animals: Provided, That such feeding stuffs, as defined above, shall not include hays, straws, fodders, ensilage, the whole seeds nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, flaxseed, maize, buckwheat, wet brewers' grains, malt sprouts, wet or dried beet pulp when unmixed with other materials. Neither shall it include wheat, rye and buckwheat brans or middlings not mixed with other substances, but sold separately as distinct articles of commerce, nor pure grains ground together.

(b) Before any manufacturer, company, person or persons shall sell, offer or expose for sale in this State any concentrated commercial feeding stuff, he or they shall, for each and every feeding stuff bearing a distinguishing name or trade-mark, file annually, with the Dairy and Food Commissioner a certified copy of the chemical analysis and certificate referred to in this section, and shall deposit with said Dairy and Food Commissioner a sealed glass jar, or bottle, containing at least one pound of the feeding stuff to be sold or offered for sale, together with an affidavit that it is a fair sample of the article thus to be sold or offered

for sale. He or they shall also pay annually into the State treasury a license fee of twenty dollars for each and every brand of feeding stuff he offers or exposes for sale in this State. Said fee is to be paid on or before April first of each year: Provided, That whenever the manufacturer or importer shall have paid this license fee, his agents shall not be required to do so. Whenever any manufacturer, importer, agent or seller of any commercial feeding stuff desires at any time to sell such material and has not paid the license fee therefor, he shall pay the license fee prescribed in this section, before making any such sale. The money collected under the provisions of this act shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the regular appropriation therefor.

(c) Whenever the manufacturer, importer, agent or seller of any commercial feeding stuff shall have complied with the requirements of this section, the Dairy and Food Commissioner shall issue or cause to be issued, a license, permitting the sale of said feeding stuff, which license shall terminate on April first following the date of issue.

(d) All such analyses of commercial feeding stuffs required by this act, shall be made under the direction of the Dairy and Food Commissioner, and shall be paid for out of the funds arising from the license fees provided for in this section.

(e) The Dairy and Food Commissioner shall publish, or cause to be published in bulletin form, at least annually a correct statement of all analyses made, together with any incidental information concerning same which he may deem proper.

(f) Any manufacturer, importer, company, agent, person or persons, who shall sell, offer or expose for sale, without first complying with the provisions of this act, any commercial feeding stuff, or shall attach or cause to be attached to any car, package or other quantity of said feeding stuff, an analysis stating that it contains a larger percentage of any one or more of the constituents named in this section than it really does contain shall, upon conviction thereof, be fined not less than one hundred dollars for the first offense, and not less than three hundred dollars for every subsequent offense, and the offender shall also be liable for damages sustained by the purchaser of such feeding stuff on account of such misrepresentation.

(g) The Dairy and Food Commissioner, by any duly authorized agent, is hereby authorized to select from any package of commercial or other feeding stuff exposed or offered for sale in this State, a quantity not exceeding two pounds for a sample, such sample to be used for the purposes of an official analysis and for comparison with the certificate filed with the Dairy and Food Commissioner, and with the certificate affixed to the package on sale.

[Added by Act No. 12, P. A. 1905.]

19. Sec. 19. The published annual report of the Dairy and Food Commissioner which shall be made to the Governor, shall include a complete accounting of all moneys received by the department from every source, and the amount expended by the department.

[Added by Act No. 12, P. A. 1905.]

20. Sec. 20. All acts and parts of acts inconsistent with this act so far as they are inconsistent are hereby repealed.

This act is ordered to take immediate effect.

[Added by Act No. 12, P. A. 1905.]

AN ACT in relation to the powers and duties of the Dairy and Food Commissioner of the State of Michigan.

(Act No. 167, Public Acts, 1899.)

The People of the State of Michigan enact:

21. Section 1. That any person who shall obstruct the Dairy and Food Commissioner, or his deputy, or any of his duly appointed inspectors, by refusing to allow him entrance to any place where he is authorized to enter in the discharge of his official duty, or refuses to deliver to him a sufficient sample for the analysis of any article of food or drink sold, offered or exposed for sale, or in his possession for the purpose of sale, wherever the same may be found, when the same is requested and when the value thereof is tendered, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not less than ten days or more than ninety days, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

This act is ordered to take immediate effect.

AN ACT for the prevention and suppression of foul brood among bees in the State of Michigan, and the inspection thereof, and to make an appropriation therefor, and to repeal act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven.

(Act No. 66, Public Acts, 1901.)

The People of the State of Michigan enact:

22. Section 1. The Dairy and Food Commissioner upon receipt of a certified copy of the record of the Michigan State Beekeepers' Association, by the secretary of said association, showing that a majority of the members of said association recommended the appointment of an inspector of apiaries, shall appoint a State inspector of apiaries. Said inspector shall be responsible to the Dairy and Food Commissioner and shall comply with such rules and regulations as the Dairy and Food

for sale. He or they shall also pay annually into the State treasury a license fee of twenty dollars for each and every brand of feeding stuff he offers or exposes for sale in this State. Said fee is to be paid on or before April first of each year: Provided, That whenever the manufacturer or importer shall have paid this license fee, his agents shall not be required to do so. Whenever any manufacturer, importer, agent or seller of any commercial feeding stuff desires at any time to sell such material and has not paid the license fee therefor, he shall pay the license fee prescribed in this section, before making any such sale. The money collected under the provisions of this act shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the regular appropriation therefor.

(c) Whenever the manufacturer, importer, agent or seller of any commercial feeding stuff shall have complied with the requirements of this section, the Dairy and Food Commissioner shall issue or cause to be issued, a license, permitting the sale of said feeding stuff, which license shall terminate on April first following the date of issue.

(d) All such analyses of commercial feeding stuffs required by this act, shall be made under the direction of the Dairy and Food Commissioner, and shall be paid for out of the funds arising from the license fees provided for in this section.

(e) The Dairy and Food Commissioner shall publish, or cause to be published in bulletin form, at least annually a correct statement of all analyses made, together with any incidental information concerning same which he may deem proper.

(f) Any manufacturer, importer, company, agent, person or persons, who shall sell, offer or expose for sale, without first complying with the provisions of this act, any commercial feeding stuff, or shall attach or cause to be attached to any car, package or other quantity of said feeding stuff, an analysis stating that it contains a larger percentage of any one or more of the constituents named in this section than it really does contain shall, upon conviction thereof, be fined not less than one hundred dollars for the first offense, and not less than three hundred dollars for every subsequent offense, and the offender shall also be liable for damages sustained by the purchaser of such feeding stuff on account of such misrepresentation.

(g) The Dairy and Food Commissioner, by any duly authorized agent, is hereby authorized to select from any package of commercial or other feeding stuff exposed or offered for sale in this State, a quantity not exceeding two pounds for a sample, such sample to be used for the purposes of an official analysis and for comparison with the certificate filed with the Dairy and Food Commissioner, and with the certificate affixed to the package on sale.

[Added by Act No. 12, P. A. 1905.]

19. Sec. 19. The published annual report of the Dairy and Food Commissioner which shall be made to the Governor, shall include a complete accounting of all moneys received by the department from every source, and the amount expended by the department.

[Added by Act No. 12, P. A. 1905.]

20. Sec. 20. All acts and parts of acts inconsistent with this act so far as they are inconsistent are hereby repealed.

This act is ordered to take immediate effect.

[Added by Act No. 12, P. A. 1905.]

AN ACT in relation to the powers and duties of the Dairy and Food Commissioner of the State of Michigan.

(Act No. 167, Public Acts, 1899.)

The People of the State of Michigan enact:

21. Section 1. That any person who shall obstruct the Dairy and Food Commissioner, or his deputy, or any of his duly appointed inspectors, by refusing to allow him entrance to any place where he is authorized to enter in the discharge of his official duty, or refuses to deliver to him a sufficient sample for the analysis of any article of food or drink sold, offered or exposed for sale, or in his possession for the purpose of sale, wherever the same may be found, when the same is requested and when the value thereof is tendered, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not less than ten days or more than ninety days, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

This act is ordered to take immediate effect.

AN ACT for the prevention and suppression of foul brood among bees in the State of Michigan, and the inspection thereof, and to make an appropriation therefor, and to repeal act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven.

(Act No. 66, Public Acts, 1901.)

The People of the State of Michigan enact:

22. Section 1. The Dairy and Food Commissioner upon receipt of a certified copy of the record of the Michigan State Beekeepers' Association, by the secretary of said association, showing that a majority of the members of said association recommended the appointment of an inspector of apiaries, shall appoint a State inspector of apiaries. Said inspector shall be responsible to the Dairy and Food Commissioner and shall comply with such rules and regulations as the Dairy and Food

Commissioner shall from time to time prescribe for the carrying out of the work of said State inspector.

23. Sec. 2. The Dairy and Food Commissioner shall, when notified in writing by the owner of an apiary or by three disinterested tax payers in the vicinity of the apiary, cause the inspector to examine such apiaries as are reported and all others in the same locality not reported, and ascertain whether or not the disease known as foul brood or other contagious disease exists in such apiaries, and if satisfied of the existence of foul brood, he shall give the owner or caretaker of the diseased apiaries full instructions how to treat said case as in the inspector's judgment seems best.

24. Sec. 3. The inspector who shall be the sole judge may visit all diseased apiaries a second time and if need be burn all colonies of bees and combs that may be found not cured of foul brood or other contagious disease.

25. Sec. 4. If the owner of a diseased apiary, honey or appliances shall knowingly or wilfully sell, barter or give away any bees, honey or appliances, or expose other bees to the danger of said disease or refuse to allow said inspector to inspect such apiary, honey or appliances, said owner shall on conviction before a justice of the peace, be liable to a fine of not less than fifty dollars nor more than one hundred dollars, or not less than one month's imprisonment in the county jail, nor more than two month's imprisonment.

26. Sec. 5. In addition to such individual reports as are required under this act by the inspector of apiaries, he shall make an annual report to the Dairy and Food Commissioner, giving the number of the apiaries visited, the number of diseased apiaries found, the number of colonies treated, also the number of colonies destroyed by fire, and an itemized account of his transportation expenses with affidavit annexed thereto.

27. Sec. 6. There is hereby appropriated out of any money in the State treasury not otherwise appropriated a sum not exceeding five hundred dollars per year for the suppression of foul brood among bees in Michigan. The inspector shall receive five dollars per day and actual transportation and expenses for actual time served, which sum shall not exceed the money hereby appropriated, to be paid by the State Treasurer upon warrants drawn by the Auditor General and approved by the Dairy and Food Commissioner.

[Am. by Act No. 230, Public Acts 1909.]

28. Sec. 7. Act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven is hereby repealed.

This act is ordered to take immediate effect.

GENERAL FOOD LAW.

AN ACT to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink.

(Act No. 193, Public Acts, 1895.)

The People of the State of Michigan enact:

29. (C. L., 5010) Section 1. That no person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food which is adulterated within the meaning of this act.

[Am. by Act No. 118, P. A. 1897.]

30. (C. L., 5011) Sec. 2. The term food, as used herein, shall include all articles used for food or drink, or intended to be eaten or drank by man, whether simple, mixed or compound.

31. (C. L., 5012) Sec. 3. An article shall be deemed to be adulterated within the meaning of this act: *First*, If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; *Second*, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; *Third*, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; *Fourth*, If it is an imitation of, or is sold under the name of another article; *Fifth*, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal; *Sixth*, If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; *Seventh*, If it contains any added substance or ingredient which is poisonous or injurious to health: Provided, That nothing in this act shall prevent the coloring of pure butter: And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section.

[Am. by Act No. 118, P. A. 1897.]

32. (C. L., 5013) Sec. 4. No person, by himself or his agents or servants, shall manufacture for sale or offer or expose for sale, or sell, as butter, and the legitimate product of the dairy or creamery, any article not made exclusively of milk or cream, but into which the oil or fat of animals, or any other oils not produced from milk, enters as a

component part, has been introduced to take the place of cream. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail, or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

33. (C. L., 5014) Sec. 5. No person shall manufacture, deal in, sell, offer or expose for sale or exchange, any article or substance in the semblance of, or in imitation of cheese made exclusively of unadulterated milk or cream, or both, into which any animal, intestinal or offal fats or oils or melted butter in any condition or state or modification of the same, or oleaginous substances of any kind not produced from unadulterated milk or cream shall have been introduced. Whoever shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

34. (C. L., 5015) Sec. 6. Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery or butter factory and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of October, A. D. eighteen hundred ninety-seven, and on or before the first day of April in each year thereafter. Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

[Am. by Act No. 118, P. A. 1897.]

35. (C. L., 5016) Sec. 7. The Dairy and Food Commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October, A. D. eighteen hundred ninety-five and on or before the first day of April in each year thereafter, and under such regulation as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto and the words "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese, and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location and number of

each manufactory using the brand, and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. The commissioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same, which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the Dairy and Food Commissioner is charged.

36. (C. L., 5017) Sec. 8. No person shall knowingly offer, sell or expose for sale, in any package, cheese which is falsely branded or labeled.

37. (C. L., 5018) Sec. 9. No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell as lard, any substance not the legitimate and exclusive product of the fat of the hog.

38. (C. L., 5019) Sec. 10. Every person who manufactures for sale, has in his possession with intent to sell, offers or exposes for sale, or sells, any substance made in the semblance of lard, or as an imitation of lard, and which consists of any mixture or compound of animal or vegetable oils, or fats, other than hog fat, in the form of lard, shall cause the tierce, barrel, tub, pail or package containing the same to be distinctly and legibly branded or labeled "Lard substitute or compound," and every person who manufactures for sale, has in his possession with intent to sell, offers or exposes for sale or sells, any substance made in the semblance of lard or as an imitation of lard, or as a substitute for lard, and which is designed to take the place of lard, and which consists of any mixture or compound of lard with animal or vegetable oils, or fats, shall cause the tierce, barrel, tub, pail or package containing the same to be distinctly and legibly branded or labeled either "Adulterated lard," "Lard compound," or "Lard substitute." Such brands or labels shall be in letters not less than one inch in length and shall be followed with the name of the maker and factory, and the location of such factory.

39. (C. L., 5020) Sec. 11. Every dealer or trader who, by himself or agent, or as the servant or agent of another person, offers or exposes for sale, or sells any form of lard substitute or adulterated lard, as hereinbefore defined, shall securely affix or cause to be affixed to the package wherein the same is contained, offered for sale or sold, a label upon the outside and face of which is distinctly and legibly printed in letters not less than one-half inch in length, the words "Lard substitute" or "Adulterated lard" or "Lard compound" or other appropriate word which shall correctly express its nature and use.

40. (C. L., 5021) Sec. 12. The having in possession of any lard substitute or adulterated lard or lard compound, as hereinbefore defined, which is not branded or labeled as hereinbefore required and directed, upon the part of any dealer or trader, or any person engaged in the public sale of such articles, shall for the purpose of the act be deemed prima facie evidence of intent to sell the same.

41. (C. L., 5022) Sec. 13. No person, firm or corporation in this State shall manufacture for sale, or sell, or offer or expose for sale, as fruit jelly or fruit butter, any jelly or imitation fruit butter or other similar compound made or composed in whole or in part of glucose, dextrine,

starch or other substances, and colored in imitation of fruit jelly or fruit butter; nor shall any such jelly, fruit butter or compound be manufactured or sold, or offered for sale, under any name or designation whatever, unless the same shall be composed entirely of ingredients not injurious to health, and shall not be colored in imitation of fruit jelly, and every can, pail, or package of such jelly or butter sold in this State shall be distinctly and durably labeled "Imitation fruit jelly or butter," with the name of the manufacturer and the place where made. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and when convicted thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court.

42. (C. L., 5023) Sec. 14. No packer or dealer in preserved or canned fruits and vegetables or other articles of food, shall sell or offer for sale such canned articles, unless such articles shall be entirely free from substances or ingredients deleterious to health, and unless such articles bear a mark, stamp, brand or label bearing the name and address of the firm, person or corporation that packs the same. All "Soaked or bleached goods" or goods put up from products dried before canning, shall be plainly marked, branded, stamped or labeled as such, with the words "Soaked or bleached goods," in letters not less than two-line pica in size, showing the name of the article and the name and address of the packer.

43. (C. L., 5024) Sec. 15. No person shall manufacture or sell, or offer for sale any manufactured or artificial coffee berry in imitation of the genuine berry. No person shall manufacture, sell or offer or expose for sale any ground or prepared coffee, which is adulterated with chicory or other substance not injurious to health, unless each package thereof shall be distinctly labeled or marked "Coffee compound," together with the name and address of the manufacturer or compounder thereof, and has no other label of whatever name or designation. No person shall offer or expose for sale, have in his possession with intent to sell, or sell any molasses, syrup or glucose, unless the barrel, cask, keg, can or pail containing the same shall be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any molasses or syrup mixed with glucose, unless the barrel, cask, keg or pail containing the same be distinctly branded or labeled "Glucose mixture," and the per cent in which glucose enters into its composition. Such barrel, cask, keg or pail shall be branded or labeled in a conspicuous place; and such brands or labels shall be in letters of not less than one-half inch in length. Glucose and glucose mixtures shall have no other designation than herein required.

[Am. by Act No. 118, P. A. 1897.]

44. (C. L., 5025) Sec. 16. No person shall within this State manufacture, brew, distil, have or offer for sale, or sell, any spirituous or fermented or malt liquors, containing any substance or ingredient not normal or healthful, to exist in spirituous, fermented or malt liquors,

or which may be deleterious or detrimental to health when such liquors are used as a beverage.

45. (C. L., 5026) Sec. 17. The taking of orders or the making of agreements or contracts, by any person, firm or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of this act, shall be deemed a sale within the meaning of this act.

46. (C. L., 5027) Sec. 18. Whoever shall falsely brand, mark, stencil or label any article or product required by this act to be branded, marked, stenciled, or labeled, or shall remove, alter, deface, mutilate, obliterate, imitate or counterfeit any brand, mark, stencil or label so required, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred nor more than one thousand dollars and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

47. (C. L., 5028) Sec. 19. Whoever shall do any of the acts or things prohibited, or wilfully neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and where no specific penalty is prescribed by this act shall be punished by a fine of not less than twenty-five nor more than five hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment, in the discretion of the court.

[Am. by Act No. 117, P. A. 1899.]

48 (C. L., 5029) Sec. 20. It shall be the duty of the Dairy and Food Commissioner of the State to investigate all complaints of violations of this act, and take all steps necessary to its enforcement. It shall be the duty of all prosecuting officers of this State to prosecute to completion all suits brought under the provisions of this act upon the complaint of the commissioner or of any citizen. It shall be the duty of all food inspectors in cities to examine all complaints made to them of violation of this act, and to render assistance in enforcing its provisions. It shall also be the duty of all health boards in cities and health officers in townships to take cognizance of and report or prosecute all violations of this act that may be brought to their notice, or they may have cognizance of, within their jurisdiction.

49. Sec. 21. All acts and parts of acts inconsistent with this act are hereby repealed.

BUCKWHEAT FLOUR.

AN ACT in relation to the manufacture and sale of buckwheat flour.

(Act No. 208, Public Acts, 1903.)

The People of the State of Michigan enact:

50. Section 1. Within this State no person shall manufacture, offer or expose for sale, keep in possession with intent to sell, or sell any ground buckwheat containing any product of wheat, corn, rice or other foreign substance, unless each and every package thereof be distinctly and legibly branded or labeled "Buckwheat Flour Compound" in letters not less than one-half inch in length and be followed with the name of the maker and factory and the location of such factory.

51. Sec. 2. Any brand or label herein required shall be an inseparable part of the general or distinguishing label, and such label shall be that principal and conspicuous sign under which it is sold, and any other label or printed matter upon the package shall not be in contravention of the requirements of this act.

52. Sec. 3. The having in possession of any buckwheat flour compound, which is not branded or labeled as hereinbefore required and directed upon the part of any person engaged in the public or private sale of such article, shall, for the purpose of this act, be deemed prima facie evidence of intent to sell the same.

53. Sec. 4. The taking of orders or the making of agreements or contracts by any person, firm or corporation or by any agent or representative thereof, for the future delivery of buckwheat flour compound shall be deemed a sale within the meaning of this act.

54. Sec. 5. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

55. Sec. 6. Act number eighty-four of the public acts of eighteen hundred ninety-seven, entitled "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of buckwheat flour," being section four thousand nine hundred ninety-four to five thousand two, both inclusive, of the Compiled Laws of one thousand eight hundred ninety-seven is hereby repealed.

VINEGAR.

AN ACT in relation to the manufacture and sale of vinegar, and to repeal act number two hundred and twenty-four of the public acts of eighteen hundred and eighty-nine, approved July one, eighteen hundred and eighty-nine.

(Act No. 71, Public Acts, 1897.)

The People of the State of Michigan enact:

56. (C. L., 5003) Section 1. That no person shall manufacture for sale, offer or expose for sale, sell or deliver, or have in his possession with intent to sell, or deliver, any vinegar not in compliance with the provisions of this act. No vinegar shall be sold as apple, orchard or cider vinegar, which is not the legitimate product of pure apple juice, known as apple cider or vinegar, not made exclusively of said apple cider or vinegar into which foreign substance, drugs or acids have been introduced, as may appear upon proper test, and upon said test, shall contain not less than one and three-fourths per cent, by weight, of cider vinegar solids upon full evaporation at the temperature of boiling water.

57. (C. L., 5004) Sec. 2. All vinegar made by fermentation and oxidation without the intervention of distillation shall be branded "fermented vinegar," with the name of the fruit or substance from which the same is made. And all vinegar made wholly or in part from distilled liquor shall be branded "distilled vinegar," and all of such distilled vinegar shall be free from coloring matter added during or after distillation and from color other than that imparted to it by distillation. And all fermented vinegar not distilled shall contain not less than one and three-fourths per cent, by weight, upon full evaporation (at the temperature of boiling water) of solids, contained in the fruit or grain from which said vinegar is fermented, and said vinegar shall contain not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. And all vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made, and shall contain no foreign substance, and shall contain not less than four per cent, by weight, of absolute acetic acid.

58. (C. L., 5005) Sec. 3. No person shall manufacture for sale, offer for sale, or have in his possession with intent to sell, any vinegar found upon proper test to contain any preparation of lead, copper, sulphuric or other mineral acid, or other ingredients injurious to health. And all packages containing vinegar shall be marked, stenciled or branded on the head of the cask, barrel or keg containing such vinegar with the name and residence of the manufacturer together with brand required in section two hereof.

59. (C. L., 5006) Sec. 4. Whoever violates any of the provisions of this act shall, upon conviction, be fined not less than fifty dollars nor

more than one hundred dollars, or imprisonment in the county jail not to exceed ninety days and the costs of prosecution, or by both such fine and imprisonment in the discretion of the court.

60. Sec. 5. All acts and parts of acts contravening the provisions of this act are hereby repealed.

MILK.

AN ACT to prevent and punish offenders for the adulteration of milk, and the products made therefrom, and to repeal an act, entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one.

(Act No. 26, Public Acts, 1873.)

The People of the State of Michigan enact:

61. (C. L., 11411) Section 1. That whoever shall knowingly sell to any person or persons, or sell, deliver, or bring to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings," with intent to defraud, or shall knowingly sell milk, the product of a sick or diseased animal or animals, or any milk produced from any cow fed upon the refuse of a distillery, or of a brewery, or upon any substance deleterious to the quality of the milk, or shall knowingly use any poisonous or any deleterious material in the manufacture of any cheese or butter, or shall knowingly sell or offer to sell any cheese or butter, in the manufacture of which any poisonous or deleterious substance has been used, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than ten dollars nor more than one hundred dollars; and may be committed to the county jail until such fine shall be paid: Provided, That such imprisonment shall not exceed ninety days; and shall be liable in double the amount of damages to the person or persons, firm, association, or corporation upon which such fraud shall have been committed. An act entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one, is hereby repealed: Provided, That any right accrued or forfeiture incurred under said act, shall remain valid and binding, and may be enforced under said act as if the same were not repealed.

AN ACT to prevent the sale of impure, unwholesome, adulterated, or swill milk in the State of Michigan, and to provide for inspectors.

(Act No. 246, Public Acts, 1887.)

The People of the State of Michigan enact:

62. (C. L., 11412) Section 1. That it shall be unlawful for any person, either by himself or agent, to sell or expose for sale within the State of Michigan any unwholesome watered, or adulterated or impure milk or swill milk or colostrum or milk from cows kept upon garbage, swill or any substance in a state of fermentation or putrefaction or other deleterious substances, or from cows kept in connection with any family in which there are infectious diseases. The addition of water or ice to milk is hereby declared an adulteration.

[Am. by Act No. 219, P. A. 1889.]

63. (C. L., 11413) Sec. 2. Any person who shall violate any of the provisions of the preceding section shall be punished by a fine not to exceed one hundred dollars or (by) imprisonment not to exceed three months or by both such fine and imprisonment, in the discretion of the court.

64. (C. L., 11414) Sec. 3. It shall be the duty of the metropolitan police commissioners of the city of Detroit, by and with the consent and advice of the board of health of the city of Detroit, to appoint an inspector, who shall be a person of previous practical experience. Said inspector may be created captain, sergeant or roundsman of the said police force of the city of Detroit, at the option of the board of metropolitan police commissioners.

65. (C. L., 11415) Sec. 4. It shall be the duty of said inspector to personally view, so far as possible, all milk exposed for sale in said city, and to visit all dairy houses, barns, or stables in said city or the county of Wayne, to inspect the same, and the animals held therein, and to visit all places where milk is kept or exposed for sale in the city of Detroit, and to inspect and ascertain the condition of said milk. He may detail any patrolman of said city to assist him in the performance of any or all of the duties enjoined on him by this act: Provided, always, That said inspector and any policeman so detailed shall always be subject to the provisions of the law establishing and governing the metropolitan police of said city.

66. (C. L., 11416) Sec. 5. It shall be the duty of said inspector or of his assistant, and of all other inspectors appointed under this act, to make complaint in writing before a police justice or justice of the peace, or other court having jurisdiction thereof, of every violation of this act coming to his knowledge.

[Am. by Act No. 219, P. A. 1889.]

67. (C. L., 11417) Sec. 6. Each and every quantity of milk sold or exposed for sale contrary to the provisions of this act, shall constitute a separate offense.

68. (C. L., 11418) Sec. 7. Any person who shall refuse to permit the said inspector, or his assistant (assistants,) to perform his duty under this act, either by refusing him entrance to his premises or by concealing any milk, or refusing to permit any milk or animal or premises wherein animals are kept, to be viewed and inspected as herein provided, or by in any manner hindering or resisting any said inspector or assistant inspector in the performance of his duty, shall be guilty of a misdemeanor, and punished therefor.

69. (C. L., 11419) Sec. 8. Authority is hereby given the common council of any city, and the board of trustees or council of any village, to appoint an inspector of milk in any such city or village, and to fix their compensation, and when appointed the said inspectors of milk shall have all the powers given by section four of this act, and shall perform all the duties required of inspectors of milk as provided herein, and such other powers and duties as may be conferred or imposed by the ordinances of said cities or villages.

70. (C. L., 11420) Sec. 9. Whoever shall adulterate by himself, or by his servant or agent, or sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale or exchange, adulterated milk or milk to which water or any foreign (substance) substances in any state of fermentation or putrefaction, or from sick or diseased cows, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia not exceeding three months.

[Added by Act No. 219, P. A. 1889.]

71. (C. L., 11421) Sec. 10. Whoever shall adulterate, himself or by his servant or agent, sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale as pure milk, any skimmed milk from which the cream or any part thereof has been removed shall be guilty of a misdemeanor, and shall for such offense, be punished by the penalty provided in the preceding section.

[Added by Act No. 219, P. A. 1889.]

72. (C. L., 11422) Sec. 11. Any dealer in milk who shall by himself, servant or agent, sell, exchange or deliver, or have in his custody or possession with intent to sell, exchange or deliver the same, milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the center upon the outside of every vessel, can or package from which any such milk is sold, the words "Skimmed milk," are distinctly painted in letters not less than one inch in length, shall be guilty of a misdemeanor and shall be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or Detroit House of Correction not exceeding three months.

[Added by Act No. 219, P. A. 1889.]

73. (C. L., 11423) Sec. 12. If milk sold or offered for sale under the provisions of this act as pure milk, is shown upon analysis by weight

to contain more than eighty-seven and fifty one-hundredths per centum of watery fluid, or to contain less than twelve and fifty one-hundredths of milk solids, per centum, or less fat than three per centum, or if the specific gravity at 60 degrees Fahrenheit is not between 1 29-1000 to 1 33-1000, it shall be deemed to be adulterated. If milk sold or offered for sale under the provisions of this act as skimmed milk has a specific gravity at 60 degrees Fahrenheit less than 1,032 and greater than 1,037, it shall be deemed to be adulterated.

[Added by Act No. 219, P. A. 1889.]

74. (C. L., 11424) Sec. 13. Whenever any inspector of milk has reason to believe that any milk found by him is adulterated, he shall take specimens thereof and test the same with such instrument or instruments as are used for such purposes, and he shall make an analysis thereof, showing total solids, the percentage of butter, the percentage of water and the percentage of ash; and if the result of such test and analysis indicates that the milk has been adulterated or deprived of its cream or any part thereof, the same shall be prima facie evidence of such adulteration in a prosecution under this act.

[Added by Act No. 219, P. A. 1889.]

75. (C. L., 11425) Sec. 14. Any person who shall remove the cream or any part thereof from milk to be sold as pure milk to any manufactory in which milk is used as a material in the process of production, and any person who shall, in any manner, adulterate such milk, either by the addition of water or otherwise, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars, or by imprisonment in the county jail or Detroit House of Correction not exceeding ninety days.

[Added by Act No. 219, P. A. 1889.]

AN ACT in relation to the sale and delivery of milk.

(Act No. 106, Public Acts, 1899.)

The People of the State of Michigan enact:

76. Section 1. No person shall offer or expose for sale, sell, exchange or deliver, or have in his possession with intent to sell, exchange or deliver, any milk to which water, chemicals or preservatives, or any other foreign substance has been added. The term milk as used in this act shall include all skimmed milk, butter milk, cream and milk in its natural state as drawn from the cow.

77. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than one dollar nor more than one hundred dollars and the costs of prosecution, or by

imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

OLEOMARGARINE.

AN ACT in relation to the manufacture and sale of oleomargarine or imitation butter.

(Act No. 147, Public Acts, 1899.)

The People of the State of Michigan enact:

78. Section 1. No person shall sell, expose or offer for sale or exchange, or have in his possession with intent to sell or exchange, any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless each and every vessel, package, roll or parcel of such substance has distinctly and durably printed, stamped or stenciled thereon in black letters the true name of such substance, in ordinary bold faced capital letters, not less than five line pica in size; and also the name and address of the manufacturer, together with the name of each and every article or ingredient used or entering into the composition of such substance, in ordinary bold faced letters, not less than pica in size.

79. Sec. 2. No person shall sell, exchange or deliver any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless he shall distinctly inform the purchaser by a verbal notice at the time of the sale that the same is a substitute for butter, and shall also deliver to the purchaser of each and every roll, package or parcel of such oleomargarine or other substance, at the time of the delivery of the same, a separate and distinct label, on which is plainly and legibly printed in black ink in ordinary bold faced capital letters not less than five line pica in size, the true name of such substance and also the name and address of the manufacturer, together with the name of each article used and entering into the composition of such substance, in ordinary bold faced letters not less than pica in size.

80. Sec. 3. The proprietor or keeper of any store, hotel, restaurant, eating saloon, boarding house, or other place where oleomargarine is sold or furnished to persons paying for the same, shall have placed on the walls of every store or room where oleomargarine is sold or furnished a white placard on which is printed in black ink, in plain Roman letters of not less than three inches in length, and not less than two inches in width, the words "Oleomargarine Sold or Used Here," and shall at all times keep the same exposed in such conspicuous place as to be readily seen by any and all persons entering such store, or other room or rooms.

81. Sec. 4. No person shall use in any way, in connection or association with the sale or exposure for sale or advertisement of any sub-

stance designed to be used as a substitute for butter, the word "butter," "creamery," or "dairy," or the name or representation of any breed of dairy cattle, or any combination of such word or words and representation, or any other words or symbols or combination thereof commonly used in the sale of butter.

82. Sec. 5. For the purpose of this act the word "butter" shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter.

83. Sec. 6. For the purposes of this act certain manufactured substances, certain extracts and certain mixtures and compounds, including such mixtures and compounds with butter, shall be known and designated as "oleomargarine," namely: All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, intestinal fat, and offal fat, made in imitation or semblance of butter, or when so made, calculated or intended to be sold or used as butter or for butter.

84. Sec. 7. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, in each and every offense. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

This act is ordered to take immediate effect.

AN ACT to prevent deception in the manufacture and sale of imitation butter.

(Act No. 22, Public Acts, 1901.)

The People of the State of Michigan enact:

85. Section 1. No person, by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound, made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

86. Sec. 2. Whoever violates any of the provisions of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

RENOVATED BUTTER.

AN ACT in relation to the manufacture and sale of renovated butter.
(Act No. 243, Public Acts, 1903, as amended.)

The People of the State of Michigan enact:

87. Section 1. No person, firm or corporation shall manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession with the intent to sell, exchange or deliver, any butter that is produced by taking original packing stock butter or other butter, or both, melting the same so that the butter fat can be drawn off or extracted, mixing the said butter fat with skimmed milk, or milk or cream, or other milk product, and rechurning or reworking the said mixture; nor shall any person, firm or corporation manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession for any such purpose any butter which has been subjected to any process by which it is melted, clarified or refined, and made to resemble butter, and is commonly known as boiled, process or renovated butter, and which for the purpose of this act is hereby designated as "Renovated Butter," unless the same shall be branded or marked as provided in section two of this act.

88. Sec. 2. Whoever, himself or by his agent or as the servant or agent of another person, shall sell, expose for sale or have in his custody or possession with the intent to sell any renovated butter as defined in section one of this act, shall have the words "Renovated Butter" conspicuously stamped, labeled or marked in one or two lines and in plain Gothic letters, at least three-eighths of an inch square, so that the words cannot easily be defaced, upon two sides of each and every tub, firkin, box or package containing said renovated butter; or if such butter is exposed for sale uncovered, or not in a case or package, a placard containing said words in the same form as above described in this section shall be attached to the mass in such a manner as to be easily seen and read by the purchaser. When renovated butter is sold from such packages or otherwise at retail, in print, roll or other form, before being delivered to the purchaser it shall be wrapped in wrappers plainly stamped on the outside thereof with the words "Renovated Butter" printed or stamped thereon in one or two lines, and in plain Gothic letters at least three-eighths of an inch square, and such wrapper shall contain no other words or printing thereon, and said words "Renovated

Butter" so stamped or printed on the said wrapper shall not be in any manner concealed, but shall be in plain view of the purchaser at the time of the purchase: Provided, If at any time the laws of the United States provide that butter manufactured as is described in this act, shall be labeled "Process Butter," then and in such case only shall such substitution be permitted and the labeling of said butter as "Process Butter" shall be deemed a compliance with this act.

[Am. by Act No. 119, P. A. 1909.]

89. Sec. 3. Whoever shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or Michigan Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

90. Sec. 4. Act number two hundred fifty-four of the public acts of eighteen hundred ninety-nine, entitled "An act to regulate the sale of butter produced by taking original packing stock and other butter and melting the same so that the butter oil can be drawn off, mixed with skimmed milk or other material, and by emulsion or other process produce butter, and butter produced by any similar process and commonly known as "process" butter; providing for the enforcement thereof, and punishment for the violation of the same," is hereby repealed.

CANDY.

AN ACT to prevent the adulteration of candies and to regulate the sale thereof.

(Act No. 207, Public Acts, 1911.)

The People of the State of Michigan enact:•

91. Section 1. No person, firm or corporation shall manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession with the intent to sell, exchange or deliver, any candies or confectioneries adulterated by the admixture of terra alba, barytes tale or other earthy or mineral substances, or any poisonous colors, flavors or extracts, or other deleterious ingredients detrimental to health.

92. Sec. 2. Whoever violates any of the provisions of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than fifty dollars nor more than one thousand dollars and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

93. Sec. 3. All acts and parts of acts inconsistent with this act are hereby repealed.

PEPPER.

AN ACT to provide for the manufacture and sale of black pepper in this State and to provide a penalty for the violation of the provisions of this act.

(Act No. 180, Public Acts, 1901.)

The People of the State of Michigan enact:

94. Section 1. Within this State no person, firm or corporation shall manufacture, offer or expose for sale, keep in possession with intent to sell, or sell any ground or whole black pepper containing any foreign substance whatever. All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

95. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than five hundred dollars and the costs of the prosecution, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment, in the discretion of the court.

CORN SYRUP.

AN ACT in relation to the sale of corn syrup.

(Act No. 123, Public Acts, 1903.)

The People of the State of Michigan enact:

96. Section 1. No person shall offer or expose for sale, have in his possession with intent to sell, or sell, any cane syrup, beet syrup, or glucose, unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any cane syrup or beet syrup mixed with glucose unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup," in plain Gothic type not less than three-eighths of an inch square, with the name and percentage, by weight, of each ingredient

contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-quarter of an inch square. Each and every package of syrup either simple or mixed shall bear the name and address of the manufacturer. Such mixtures or syrups shall have no other designation or brand than herein required that represents or is the name of any article which contains a saccharine substance; and all brands or labels required shall be an inseparable part of the general or distinguishing label, and that the general or distinguishing label shall be that principal and conspicuous sign under which it is sold.

97. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

PRESERVATIVES.

AN ACT in relation to the use of preservatives in food products.

(Act No. 7, Public Acts, 1905.)

The People of the State of Michigan enact:

98. Section 1. No person, firm or corporation shall manufacture, sell, offer for sale, expose for sale or have in his possession with intent to sell, any food product containing benzoic acid or benzoate of sodium, or any other harmless preservative, unless each and every package containing the same shall, in the condition in which it is exposed for sale, be distinctly, conspicuously and legibly branded, labeled or marked, in plain English letters, with the words "Prepared with" followed by the proper English name of the preservative used: Provided, That nothing in this act shall be construed to prohibit or regulate, by branding or otherwise, the use as a preservative of common salt, syrup, sugar, salt petre, spices, alcohol, vinegar, or wood smoke: And Provided Further, That the provisions of this act shall not apply to dairy products.

99. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than ten dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

AN ACT to prohibit the adulteration of maple sugar, maple molasses and maple syrup.

(Act No. 170, Public Acts, 1893.)

The People of the State of Michigan enact:

100. (5007) Section 1. That it shall be unlawful for any person, dealer, firm, manufacturer or corporation to manufacture and sell, or offer for sale, any maple sugar, maple molasses or maple syrup that is in anywise adulterated with common sugar, beet sugar, glucose or any other foreign substance without distinctly marking, stamping or labeling the article or the package containing the same with the true and appropriate name of such article and the percentage in which common sugar, beet sugar, glucose or any other foreign substance enters into the composition of the same.

101. (5008) Sec. 2. Any person, dealer, firm, manufacturer or corporation who shall sell or offer for sale, and who shall falsely stamp or misrepresent or label any cans, jugs, jars or packages containing maple molasses or maple syrup, and any person, dealer, firm, manufacturer or corporation who shall sell or offer for sale any maple sugar that is in anywise adulterated, who falsely misrepresents or labels or stamps the same, or knowingly permits such misrepresentation or false stamping or labeling, shall be deemed guilty of a misdemeanor and punished with a fine not less than fifty dollars, in case of vendor, and in the case of manufacturers and those falsely or fraudulently stamping or labeling or misrepresenting such goods, shall be fined not less than five hundred dollars, nor more than one thousand dollars, and it shall be the duty of any board of health in this State, or food commissioner, should there be one, cognizant of any violation of this act to prosecute any person, dealer, firm, manufacturer, or corporation, which it has reason to believe has violated any of the provisions of this act, and after deducting the costs of trial and conviction the balance of fine recovered, one-half be placed in the township treasury wherein the conviction is made, the balance placed to the general fund of the county. Any (person) persons, dealer, firm, manufacturer or corporation who shall knowingly sell or offer for sale any cans, jugs, jars, or packages containing maple molasses, maple syrup, or maple sugar, that is in anywise adulterated, shall be deemed guilty of a misdemeanor and punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for a period not to exceed three months, or by both such fine and imprisonment, at the discretion of the court.

102. (5009) Sec. 3. Any person, dealer, firm, manufacturer, or corporation, who shall falsely stamp or misrepresent or label any cans, jugs, jars, or packages, containing maple molasses, or maple syrup, or maple sugar, that is in anywise adulterated, or knowingly permits such (misrepresentation) misrepresentations or false stamping or labeling, shall be deemed guilty of a misdemeanor, and punished by a fine, not more than five hundred dollars, or by imprisonment in the county jail for a period of not more than one year, or by both such fine or imprisonment, in the discretion of the court.

ICE CREAM.

AN ACT to regulate the manufacture and sale of ice cream within the limits of the State of Michigan.

(Act No. 70, Public Acts, 1909.)

The People of the State of Michigan enact:

103. Section 1. No person, firm or corporation shall manufacture for sale, keep for sale, sell, barter, exchange or deal in ice cream which shall contain any substance other than milk, cream, eggs, sugar and some neutral flavoring gelatin or vegetable gums or which contain other than the required amount of milk fat as hereinafter provided.

104. Sec. 2. No person, firm or corporation shall manufacture for sale, keep for sale, sell, barter, or deal in ice cream adulterated within the meaning of this act.

105. Sec. 3. Ice cream shall be deemed to be adulterated within the meaning of this act:

First, If it shall contain boric acid, formaldehyde, saccharine, or any other added substance or compound that is deleterious to health;

Second, If it shall contain salts of copper, iron oxide, ocres or any coloring substance deleterious to health: Provided, That this paragraph shall not be construed to prohibit the use of harmless coloring matter in ice cream when not used for fraudulent purposes;

Third, If it shall contain any deleterious flavoring matter, or flavoring matter not true to name;

Fourth, If it be an imitation of, or offered for sale under the name of another article.

Nothing in this act shall be construed to prohibit the use of not to exceed one-half of one per centum of pure gelatin, gum tragacanth or other vegetable gums.

106. Sec. 4. No ice cream shall be sold within the State containing less than twelve per centum milk fat, except where fruit or nuts are used for the purpose of flavoring when it shall not contain less than ten per centum milk fat.

107. Sec. 5. It shall not be lawful for any person, firm or corporation to sell, offer for sale, expose for sale, or have in possession with intent to sell, any ice cream in any container which is falsely labeled or branded as to the name of the manufacturer thereof or to misrepresent in any way the place of manufacture of ice cream or the manufacturer thereof.

108. Sec. 6. Each person, firm or corporation engaged in the manufacture of ice cream as a business within this State, after this act shall take effect, shall file with the Dairy and Food Commissioner an application for a license accompanied with a fee of five dollars, and upon receipt of such application the Dairy and Food Commissioner shall issue to the person, firm or corporation making such application a license

to manufacture ice cream, as provided in this act, which license shall run for one year from the date of the application, and shall be renewed annually thereafter.

The money so collected by the Dairy and Food Commissioner shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner in addition to the annual appropriation therefor: Provided, That this section shall not apply except in cities of more than three thousand inhabitants, by the last United States census, to any person, firm or corporation manufacturing and selling ice cream by the dish direct to the consumer.

109. Sec. 7. Any person, firm or corporation who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction shall be fined not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than thirty days nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

110. Sec. 8. The Dairy and Food Commissioner shall be charged with the enforcement of the provisions of this act.

This act is ordered to take immediate effect.

WEIGHTS AND MEASURES.

(Act No. 208, Public Acts, 1909.)

AN ACT to establish uniform weights and measures of the various products of cereals in barrels or the fractional parts thereof when packed for sale or exposed for sale to firms or persons within this State, and to provide for the marking of the weight on packages of the products of such cereals.

The People of the State of Michigan enact:

111. Section 1. When mill products of wheat, corn, rye or buckwheat, known as flour, grits, meal or compounds of the same are placed or packed in barrels fractional parts of a barrel or sacks to be sold or billed to any person or persons within this State, the standard weight or measure of a barrel or the fractional part thereof shall be as follows, viz.:

- One hundred ninety-six pounds for a barrel;
- Ninety-eight pounds for one-half barrel;
- Forty-nine pounds for one-quarter barrel;
- Twenty-four and one-half pounds for one-eighth barrel;
- Twelve and one-fourth pounds for one-sixteenth barrel;
- Six and one-eighth pounds for one thirty-second barrel.

The full and correct weights as herein established shall be placed in said barrel or fractional part thereof by the manufacturer, company, dealer, person or persons filling the same, and the weights as herein established shall be the legal weights in this State for such packages

when they are bought or sold, offered or exposed for sale, or in possession with intent to sell, or sold and delivered, ordered or billed.

112. Sec. 2. No person or persons shall sell, offer or expose for sale in this State by the barrel, or by the fractional parts of a barrel as herein established, any of the mill products specified in section one hereof, unless the barrel or fractional part of such barrel shall contain the full weight of such mill product as is provided for in section one hereof.

113. Sec. 3. Before any package containing the mill products or compounds of such mill products specified in section one of this act shall be sold or offered or exposed for sale in this State, the number of pounds contained therein shall be plainly printed or stamped on the face label in plain English letters and numbers not less than one-half inch high. When such packages are sold as one-half, one-quarter, one-eighth, one-sixteenth or one-thirty-second of a barrel they shall be so marked in addition to the number of pounds marked thereon as herein provided.

114. Sec. 4. No manufacturer, company, dealer or person shall abstract any part of the mill products from the standard package or fractional parts named in section one, and sell such package as a barrel or fractional part of a barrel as defined in section one.

115. Sec. 5. Any manufacturer, company, dealer, person or persons who shall knowingly sell, offer or expose for sale or for distribution in this State any package containing mill products of the cereals enumerated in section one which are stamped or labeled with a greater number of pounds than such package actually contains, or who shall put up or sell in this State any of the mill products of the above named cereals in a manner contrary to the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail or the Michigan Reformatory at Ionia for not less than ninety days nor more than one year or by both such fine and imprisonment in the discretion of the court for each and every offense: Provided, however, That nothing in this act shall be construed to cover or affect sales or shipments made to any manufacturer, company, dealer, person or persons outside of this State and not intended for sale or shipment back into this State.

116. Sec. 6. It shall be the duty of the Dairy and Food Commissioner to investigate all complaints of violations of this act, and to take all steps necessary to its enforcement. It shall be the duty of all prosecuting officers of this State to prosecute to completion all suits brought under the provisions of this act upon complaint of said commissioner or any person.

117. Sec. 7. This act shall take effect and be operative from and after January first, nineteen hundred ten.

LINSEED OR FLAXSEED OIL.

(Act No. 110, Public Acts, 1909.)

AN ACT to prevent the adulteration of linseed oil or flaxseed oil and to prevent fraud in the sale thereof and in the sale of compounds thereof, and to repeal all acts in conflict herewith.

The People of the State of Michigan enact:

118. Section 1. No person, firm or corporation, by himself, his servant, or his agent, or as the servant or agent of any other person, firm or corporation, shall manufacture or mix for sale, sell, offer or expose for sale, or have in his possession with intent to sell in this State, under the name of raw linseed oil or raw flaxseed oil, any substance which is not wholly the product obtained from well cleaned flaxseed or linseed, and unless the aforesaid oil also fulfills the requirements of the nineteen hundred edition of the Pharmacopoeia of the United States, which follows:

1. Specific gravity 0.925 to 0.935 at 25 deg. C. (77 deg. F.). It does not congeal at temperatures above 20 deg. C. (—4 deg. F.). It is soluble in about ten parts of absolute alcohol and in all proportions in ether, chloroform, petroleum, benzine, carbon disulphide and oil of turpentine. It should not more than slightly redden blue litmus paper, previously moistened with alcohol (limit of free acid). The oil should be completely saponifiable with alcoholic potassium hydroxide T. S. and the resulting soap should be completely soluble in water without leaving an oily residue, (absence of mineral oils and rosin oils). If 2 CC. of the oil be warmed and shaken in a test tube with an equal volume of glacial acetic acid, and if to this mixture, after cooling, one drop of sulphuric acid be added, a greenish color should be produced. (A violet color under these circumstances indicates the presence of rosin oils). Linseed oil saponified by alcoholic potassium hydroxide T. S. should show a saponification value of from 187 to 195. If 0.15 CC. of linseed oil be dissolved in 10 CC. of chloroform in a 250 CC. flask at 25 CC. of a mixture of equal volume of alcoholic iodine T. S. and alcoholic mercuric chloride T. S. added, and if, after standing for sixteen hours, protected from the light, 20 CC. potassium iodide T. S. be introduced and the mixture diluted with 50 CC. of water, on titrating the excess of iodine with tenth normal sodium thiosulphate V. S. an iodine value of not less than 170 should be obtained. No person, firm or corporation, by himself, his servant or his agent, or as the servant or agent of any other person, firm or corporation, shall manufacture or mix for sale, sell, offer or expose for sale or have in his possession with intent to sell in this State, any substance as boiled linseed oil or as boiled flaxseed oil, unless the same shall have been prepared by heating raw linseed oil, as defined above: Provided, That if drier is used in said boiled linseed oil or boiled flaxseed oil, the same shall have been prepared by incorporating

said drier with raw linseed oil, as defined above, at a temperature of not less than 225 deg. Fahrenheit, and furthermore contains not less than 96 per cent of linseed oil; and for the purpose of this act it shall also be deemed a violation thereof if said boiled linseed oil prepared either with or without drier does not conform to the following requirements: 1. Its specific gravity at 60 deg. Fahrenheit must be not less than 0.935 and not greater than 0.945; 2. Its saponification value (Koettstorfer figure) must not be less than 186; 3. Its iodine number (Huebl's method) must be not less than 160; 4. Its acid value must not exceed 10; 5. The volatile matter expelled at 212 deg. Fahrenheit must not exceed one-half of one per cent; 6. No mineral oil shall be present and the amount of unsaponifiable matter as determined by standard methods shall not exceed 2.5 per cent; 7. The film left after flowing the oil over glass and allowing it to drain in a vertical or nearly vertical position must dry free from tackiness in not to exceed twenty hours, at a temperature of about 70 deg. Fahrenheit. Linseed oil or flaxseed oil which does not conform to the foregoing requirements shall be deemed to be adulterated within the meaning of this act.

119. Sec. 2. No person, firm or corporation, either by himself or another, shall sell, offer or expose for sale, or have in his possession with intent to sell in this State any linseed oil or flaxseed oil, except under its true name, and unless each barrel, keg, or can of such oil has plainly and durably painted, stamped, stenciled, labeled or marked thereon the true name of such oil in ordinary bold faced capital letters, not less than five lines pica in size, together with the name and address of the manufacturer, jobber or dealer: Provided, That if the contents of the package be less than twenty-five gallons, the types shall not be less than two lines pica in size. Proof that any person, firm or corporation has or had possession of any oil or compound which is adulterated or misbranded within the meaning of this act shall be prima facie evidence that the possession thereof is in violation of this act.

120. Sec. 3. Linseed oil compounds or flaxseed oil compounds designed to take the place of raw or boiled linseed oil or raw or boiled flaxseed oil as defined in section one of this act, whether sold, offered or exposed for sale under invented proprietary names or titles or not, shall bear conspicuously upon the containing vessel, in capital letters not less than five line pica in size, the word "Compound," followed immediately with the true distinctive names of the actual ingredients in the order of their greater preponderance, in the English language, in plain legible type of the same size, not less than two lines pica in size, in continuous list with no intervening matter of any kind, and shall also bear the name and address of the manufacturer, jobber or dealer. Any oil or compounds required to be branded by the provisions of this act and not complying with sections two and three shall be deemed to be misbranded within the meaning of this act.

121. Sec. 4. It is hereby made a duty of the State Dairy and Food Commissioner to enforce the provisions of this act.

122. Sec. 5. The State Dairy and Food Commissioner, his agents, assistants, inspectors, chemists or others appointed by him, shall have full rights of ingress and egress to the premises occupied by parties who manufacture, sell or deal in linseed oil or flaxseed oil, or linseed

oil compounds or flaxseed oil compounds, and also shall have power and authority to open any tank, barrel, can or other vessel believed to contain such oil and inspect the contents thereof and to take therefrom samples for analysis. In case any samples so taken shall prove on analysis to be adulterated or misbranded in violation of the provisions of this act it shall be the duty of the State Dairy and Food Commissioner to proceed against the offender as herein provided. No person shall obstruct the State Dairy and Food Commissioner or any of his assistants by refusing entrance to any place which he desires to enter in the discharge of his official duty as provided in this act, nor shall any person refuse to deliver to him a sample of oil when same is requested and when the value thereof is tendered.

123. Sec. 6. Any person, firm or corporation convicted of violating any of the provisions of the foregoing act shall, for the first offense be punished by a fine in any sum not less than twenty-five dollars and not more than one hundred dollars or by imprisonment in the county jail not exceeding thirty days, or by both such fine and imprisonment in the discretion of the court; and for the second and each subsequent offense by a fine of not less than fifty dollars and not more than two hundred dollars or by imprisonment in the county jail not exceeding one year, or both in the discretion of the court; or the fine above may be sued for and recovered before any justice of the peace or any court of competent jurisdiction, in the county where the offense shall have been committed, at the instance of the State Dairy and Food Commissioner or any other person in the name of the people of the State of Michigan as plaintiff and shall be recovered in an action of debt.

124. Sec. 7. All acts and parts of acts inconsistent with this act are hereby repealed.

DRUGS.

(Act No. 146, Public Acts, 1909.)

AN ACT to prohibit and prevent adulteration, misbranding, fraud and deception in the manufacture and sale of drugs and drug products in the State of Michigan, and to provide for the enforcement thereof.

The People of the State of Michigan enact:

125. Section 1. No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any drug or drug product which is adulterated or misbranded within the meaning of this act.

126. Sec. 2. The term "drug" as used in this act shall include all medicines and preparations recognized in the United States Pharmacopoeia or National formulary for internal or external use, and any substance or mixture of substances intended to be used for the cure, mitigation or prevention of disease of either man or other animals.

127. Sec. 3. An article shall be deemed to be adulterated within the meaning of this act:

First, If, when it is sold under or by a name recognized in the United States Pharmacopoeia or National Formulary, it differs from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopoeia or National Formulary official at the time of investigation: Provided, That no drug defined in the United States Pharmacopoeia or National Formulary shall be deemed to be adulterated under this provision if the standard of strength, quality or purity be plainly stated upon the principal label of the bottle, box or other container thereof, although the standard may differ from that determined by the test laid down in the United States Pharmacopoeia or National Formulary;

Second, If its strength or purity fall below the professed standard or quality under which it is sold.

128. Sec. 4. An article shall be deemed to be misbranded within the meaning of the act:

First, If it is an imitation of, or altered for sale under the name of another article;

Second, If the contents of the package as originally put up shall have been removed in whole or in part, and other contents shall have been placed in such package, or if the package fail to bear a statement on the label of the quantity or proportion of any alcohol, antipyrin, opium, morphine, codeine, heroin, cocaine, alpha or beta eucaine, chloroform, cannabis, indica, chloral hydrate or acetanilide, or any derivative or preparation of any such substances, contained therein: Provided, That nothing herein shall be construed to apply to the dispensing of prescriptions written by regularly licensed practicing physicians, veterinary surgeons and dentists, and kept on file by the dispensing pharmacist, nor to such drugs as are recognized in the United States Pharmacopoeia and National Formulary, and which are sold under the name by which they are so recognized;

Third, If the package containing it or its label shall bear any statement, design or device regarding the ingredients or the substances contained therein, which statement, design or device shall be false or misleading in any particular, and to any drug or drug product which is falsely branded as to the state, territory or country in which it is manufactured or produced.

129. Sec. 5. The president of the board of pharmacy, the president of the State Board of Health and the Dairy and Food Commissioner shall jointly make such rules and regulations as may be necessary for the enforcement of this act.

130. Sec. 6. It shall be the duty of the Dairy and Food Commissioner to investigate all complaints of violations of this act and take all steps necessary to its enforcement; and to this end he shall appoint two drug inspectors who shall be registered pharmacists, and one competent analyst; which inspectors and analyst shall hold office at the pleasure of said commissioner, and until others are appointed; and the said Dairy and Food Commissioner or his deputy and the said drug inspectors or any of them shall in a lawful manner inquire into the drug products which are manufactured or sold or exposed or offered for sale

in this State, and may in a lawful manner procure samples of the same for analysis; and the said Dairy and Food Commissioner, his deputy, or said drug inspectors or any of them, shall have power to enter into any factory, store, salesroom, drug store or laboratory or place where he has reason to believe drug products are made, stored, sold or offered for sale, and open any cask, jar, bottle or package containing, or supposed to contain any drug product, and take therefrom samples for analysis. The person making such inspection shall take such sample of such article or product in the presence of at least one witness, and he shall, in the presence of said witness mark or seal such sample and shall tender at the time of taking to the manufacturer or vendor of such product or to the person having the custody of the same the value thereof and a statement in writing for the taking of such sample. The said Dairy and Food Commissioner shall direct said analyst to make due and careful examination of such sample and report to him the result of such analysis and if the same is found to be adulterated or misbranded within the provisions of this act it shall be the duty of said commissioner, his deputy, or any drug inspector assigned to such duty to make complaint against the manufacturer or vendor thereof in the proper county and furnish all evidence thereof to obtain a conviction of the offense charged, and in no case shall the Dairy and Food Commissioner or drug inspector making such complaint be required to furnish security for costs in any action instituted by him having for its object the enforcement of this act: Provided, Nothing herein contained shall be held to prohibit or prevent other inspectors or chemists connected with the office of the Dairy and Food Commissioner from performing any of the duties herein imposed upon the said drug inspectors and analyst, whenever in the opinion of said Dairy and Food Commissioner the work of his office can be expedited thereby.

131. Sec. 7. In construing and enforcing the provisions of this act, the act, omission or failure of any officer, agent or other person acting for or employed by any corporation, company, society or association within the scope of his employment or office, shall, in every case, be also deemed to be the act, omission or failure of such corporation, company, society or association, as well as that of the person: Provided, That no dealer shall be prosecuted under the provisions of this act when he can establish a guaranty in accordance with the provisions of the national food and drugs act, June thirtieth, nineteen hundred six, or a guaranty signed by the wholesaler, jobber, manufacturer or other parties residing in this State, from whom he purchased such article, to the effect that the same is not adulterated nor misbranded within the meaning of this act. Said guaranty to afford protection shall contain the name and address of the party or parties making the sale of such article to such dealer, and in such case, if such guaranty was given in this State, said party or parties shall be amenable to the prosecution, fines and other penalties which would attach in due course to the dealer under the provisions of this act: Provided, however, That said guaranty shall not afford protection to the vendor in any case if said product is adulterated or misbranded within the meaning of this act, and if said vendor shall have been previously notified in writing by the Dairy and Food Commissioner to that effect: Provided further, That in no case shall the Dairy and Food Commissioner serve such notice upon any vendor of

any such product until said Dairy and Food Commissioner shall have notified the manufacturer or jobber of any such product of the findings of the State Analyst with reference to such product; such notification to such manufacturer or jobber shall be in writing and shall be mailed ten days previous to any notice sent to any vendor in accordance with this section.

132. Sec. 8. Nothing in this act shall affect any drug product manufactured in this State for export to any foreign country or for sale in any other state, when such drug product is not adulterated or misbranded within the meaning of the laws of such foreign country or state; but if said article shall be in fact sold or offered for sale for use or consumption within this State, then such article shall not be exempt from the operation of any of the provisions of this act.

133. Sec. 9. It shall be the duty of each prosecuting attorney, when called upon by the said Dairy and Food Commissioner, or by any person by him authorized as aforesaid, to render any legal assistance in his power in proceedings under the provisions of this act or any subsequent act relative to the adulteration or misbranding of drug products.

134. Sec. 10. Whoever shall do any of the acts or things prohibited, or wilfully neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than twenty-five nor more than five hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both fine and imprisonment in the discretion of the court.

135. Sec. 11. The sum of six thousand dollars is hereby appropriated for the fiscal year ending June thirtieth, nineteen hundred eleven, and for each fiscal year thereafter there is hereby appropriated the sum of six thousand dollars. Out of the amounts appropriated by this act shall be paid all salaries and expenses provided for herein.

TURPENTINE.

AN ACT regulating the sale of turpentine and providing penalties for the violation of this act.

(Act No. 175, Public Acts, 1911.)

The People of the State of Michigan enact:

136. Section 1. No person, firm or corporation shall manufacture, mix for sale, sell or offer for sale for other than medical purposes, under the name of turpentine or under a name composed of a part or parts of the word turpentine, or spirits of turpentine, and any article which is not wholly distilled from resin, turpentine gum or scrape from pine trees and unmixed and unadulterated with oil, benzine or other foreign substance of any kind whatsoever, unless the package containing the

same shall be stenciled or marked with letters not less than one inch square and one-fourth inch apart "Adulterated Turpentine," except turpentine produced from turpentine gum extracted wholly from pine wood, which turpentine is known as "Wood Turpentine" must be stenciled or marked "Wood Turpentine" with letters not less than one inch square and one-fourth inch apart. When such wood turpentine is mixed and adulterated with oil, benzine or other foreign substance of any kind whatsoever, the container shall be stenciled or marked "Adulterated Wood Turpentine" with letters not less than one inch square and one-fourth inch apart. When wood turpentine is mixed with turpentine distilled from resin, turpentine gum, or scrape from pine trees, in any quantity whatsoever, the container shall be stenciled or marked "Wood Turpentine" with letters not less than one inch square and one-fourth inch apart. Nothing herein contained shall be construed to prohibit the manufacture or sale of any compound or imitation providing the container shall be plainly marked and the purchaser notified as aforesaid.

137. Sec. 2. The Dairy and Food Commissioner of Michigan shall enforce the provisions of this chapter and the penal statutes relating thereto, and such commissioner, his assistants, experts, chemists and agents shall have access and ingress to the places of business, stores and buildings used for the sale of turpentine, and may open any package, can or jar or other receptacle containing any turpentine that may be manufactured, sold or offered for sale in violation of this statute. The inspectors, assistants or chemists appointed by such commissioner shall perform like duties and have like authority under this chapter and the penal statutes relating thereto as is provided by law in other cases. Such commissioner shall publish bulletins from time to time giving the results of the inspections and analyses with such information as he deems suitable.

138. Sec. 3. Whosoever violates any provision of law relating to the labeling, marking or stenciling of turpentine or wood turpentine by manufacturers or distributors thereof, shall be fined not more than fifty dollars for the first offense, and for each subsequent offense shall be fined not less than fifty dollars nor more than one hundred dollars, or imprisoned not less than thirty days nor more than one hundred days or both.

AN ACT to regulate the sampling and testing of milk and cream and the use of the Babcock test and to make the violation of any provision hereof a misdemeanor.

(Act No. 280, Public Acts, 1907.)

The People of the State of Michigan enact:

139. Section 1. In taking samples of milk or cream from any milk can, cream can or any container of milk or cream, the contents of such milk can, cream can, or container of milk and cream shall first be thoroughly mixed either by stirring or otherwise and the sample shall be taken immediately after mixing, or by any other method which gives a representative average sample of the contents, and it is hereby made

a misdemeanor to take samples by any method which does not give a representative average sample where milk or cream is bought or sold, and where the value of said milk or cream is determined by the butter fat contained in the same by the Babcock test.

140. Sec. 2. In the use of the Babcock test, the standard milk measures or pipettes shall have a capacity of 17.6 cubic centimeters at sixty degrees Fahrenheit and the standard test tubes or bottles for milk shall have a capacity of two cubic centimeters for each ten per cent, marked on the necks thereof; cream shall be tested by weight and the standard unit for testing shall be 18 grams, and it is hereby made a misdemeanor to use any other standards of milk or cream measure where milk or cream is purchased by or furnished to creameries or cheese factories, condensed milk factories, milk depots, or any other place where the value of said milk or cream is determined by the per cent of butter fat contained in the same by the Babcock test.

141. Sec. 3. It shall be unlawful for the owner, manager, agent or any employe of a cheese factory, creamery, condensed milk factory or milk depot or other place where milk or cream is tested for quality or value to falsely manipulate or under-read or over-read the Babcock test, or make settlements on any other basis than the correct reading of the Babcock test or any other contrivance used for determining the quality or value of milk or cream where the value of said milk or cream is determined by the per cent of butter fat contained in the same or to make any false determination by the Babcock test or otherwise.

142. Sec. 4. Whoever shall violate any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than ten dollars nor more than fifty dollars for each and every offence or be imprisoned in the county jail not less than ten days nor more than thirty days.

MICHIGAN SUPREME COURT.

DECISIONS RELATIVE TO DAIRY AND FOOD LAWS.

PEOPLE v. SNOWBERGER.

(Opinion filed May 25, 1897.)

Adulteration of Food—Statutory Offenses—Intent—Police Power.

1. It is competent for the legislature under the police power, to provide for the protection of the public health by making it an offense punishable by fine and imprisonment to sell adulterated food or drink, irrespective of the seller's knowledge of the adulteration.
2. Act No. 193, Public Acts 1895, prohibits the manufacture or sale of adulterated articles of food or drink, and prescribes what shall be deemed adulteration within the meaning of the act. Section 8 forbids any person from *knowingly* offering for sale cheese which is falsely labeled; this being the only case in which knowledge is expressly made an element of an offense designated by such statute. *Held*, that proof of guilty knowledge or intent is not essential to the conviction of one who sells adulterated food.

(113 Mich. 86.)

Exceptions before judgment from Monroe; Kinne, J.

Michael Snowberger was convicted of selling adulterated food, in violation of Act No. 193, Public Acts of 1895.

Conviction affirmed.

William Look and Ira G. Humphrey, for appellant.

Bowen, Douglas & Whiting, of counsel.

Willis Baldwin, Prosecuting Attorney, for the people.

Long, C. J.: Respondent was convicted under an information charging that: "On the 19th day of April, A. D. 1897, at the city of Monroe, and in the county aforesaid, Michael Snowberger did offer for sale, and sell, to Carl Franke, an adulterated article of food, to wit: A quantity of mustard, to wit, a quarter of a pound, colored and adulterated with tumeric, whereby the said mustard, as an article of food, was damaged and its inferiority concealed and whereby it was made to appear of better and of greater value than it really was, the same not being a mixture or compound recognized as ordinary articles or ingredients of articles of food; contrary to the form of the statute in such case made and provided," etc.

The information was filed under Act No. 193, Public Acts 1895, entitled "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink." The act provides:

Section 1. "No person shall within this state manufacture for sale, offer for sale, or sell any article of food which is adulterated within the meaning of this act."

Section 2. "The term food as used herein, shall include all articles used for food or drink, or intended to be eaten or drunk by man, whether simple, mixed or compound."

Section 3. "An article shall be deemed to be adulterated within the meaning of this act: One, If any substance or substances have been mixed with it so as to lower or depreciate or injuriously affect its quality, strength or purity; Two, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; Three, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; Four, If it is sold under the name of another article; Five, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or in case of milk, if it is the product of a diseased animal; Six, If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; Seven, If it contains an added substance or ingredient which is poisonous or injurious to health: Provided, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale be distinctly labeled as mixtures or compounds, and are not injurious to health."

Section 19 makes any violation of the act a misdemeanor and provides a penalty by a fine of not less than \$100 nor more than \$500, or by imprisonment in the county jail, etc.

On the trial respondent admitted, that on the 19th day of April, 1897, he, at the city of Monroe, this State, offered for sale and did sell to Carl Franke a quantity of mustard, to wit, a quarter of a pound which was afterwards found upon a chemical examination to be colored and adulterated with tumeric, whereby the said mustard as an article of food was damaged and its inferiority concealed, and it was thereby made to appear of greater and better value than it really was; the same not being a mixture or compound recognized as an ordinary article or ingredient of articles of food.

But he claimed that said article of mustard, so sold was purchased by him as a pure article in good faith, and that he believed at the time of the purchase by him and also at the time of the sale to the said Franke, that the same was pure mustard, free from any coloring and adulteration with tumeric or any other coloring or adulterant, and that no inferiority was concealed whereby it was made to appear of greater or better value than it really was; that at the time he purchased the same he asked for pure mustard and that the same was warranted to him as pure; that he did not make or cause to have made a chemical examination of the same and did not inform himself or endeavor to ascertain the methods of determining pure from impure mustards, but relied upon the representations of his vender and the appearance of the article to the eye; and that he did not intend to violate the law.

From such conviction respondent appeals.

It is the contention of counsel for respondent that it was the intent of the legislature to provide by the act that no person should be convicted and punished for selling adulterated food or drink without showing that he knew the same to be adulterated; that the information does not charge such knowledge, and the proofs disclosed that respondent acted in good faith and in the belief that the article sold was pure and unadulterated.

The act cannot be so construed. The offense under the act consists in selling an article intended to be eaten or drunk which is adulterated. Section 8 of the acts shows conclusively that the legislature did not intend to make criminal intent or guilty knowledge a necessary ingredient of the offense. As a rule there can be no crime without a criminal intent; but this rule is not universal.

In *People v. Roby*, 52 Mich. 577 (50 Am. Rep. 270), the respondent was convicted of the offense under the statute of keeping his saloon open on Sunday. It was there said: "It is contended that to constitute an offense under the section referred to (How. Stat., Sec. 2274), there must be some evidence tending to show an intent on the part of the respondent to violate it. * * * The section under which Roby is prosecuted makes the crime consist, not in the affirmative act of any person, but in the negative conduct of failing to keep the saloon closed. As a rule there can be no crime without a criminal intent; but this is not by any means a universal rule. One may be guilty of the high crime of manslaughter when his only fault is gross negligence, and there are many other cases where mere neglect may be highly criminal. Many statutes which are in the nature of police regulations, as this is, impose criminal penalties irrespective of any intent to violate them; the purpose being to require a degree of diligence for the protection of the public which shall render violation impossible."

Many cases are cited in that case where convictions were sustained although the element of guilty knowledge was lacking. Thus in Massachusetts a person may be convicted of the crime of selling intoxicating liquors as a beverage though he did not know it to be intoxicating.

Com. v. Boynton, 2 Allen, 160.

And of the offense of selling adulterated milk, though ignorant of its adulteration.

Com. v. Farren, 9 Allen, 489.

Com. v. Nichols, 10 Allen, 199.

Com. v. Waite, 11 Allen, 264.

Com. v. Smith, 103 Mass., 444.

In Missouri a magistrate may be liable to the penalty for performing the marriage ceremony for minors without consent of parents or guardians, though he may suppose them to be of the proper age.

Beckham v. Nacke, 56 Mo., 546.

Where the killing and sale of a calf under a specified age is prohibited there may be a conviction though the party was ignorant of the animal's age.

Com. v. Raymond, 97 Mass., 567.

In *People v. Welsh*, 71 Mich. 548, this court in speaking of *People v. Roby*, supra, said: "When a statute does not make intent an element of the offense, but commands an act to be done or omitted which in the absence of the statute might have been done or omitted without culpability, ignorance of the fact or state of things contemplated by the statute will not excuse its violation;" citing:

State v. Hartfiel, 24 Wis., 60.

In the late case in this court of *Walcott v. Judge of Superior Court*, 112 Mich. 311, the relator, as prosecuting attorney of the county, filed an information against one Fred Saunders, charging him with being engaged in selling liquor without giving the bond required by the statute. The bond was fair upon its face, but one of the sureties, it appears, was disqualified under section 2283dl, 3 How. Stat. The information did not allege that respondent had knowledge of this defect in the bond. The information was quashed by the court below, and the relator asked the aid of mandamus to compel the respondent to reinstate the case. It was said by this court in the majority opinion: "It was the intention of the legislature to make the execution and delivery of the prescribed bond a condition precedent to sale, and to require the person desiring to engage in the business mentioned to assume the responsibility of knowing that the bond when presented complies in all essential particulars with the law. He must know that his sureties are males, that they are resident freeholders of the township, village or city in which the business is to be carried on, that they hold none of the offices prohibited by the act, and that at the time the bond is filed neither is a surety upon more than two bonds required by the act."

It appeared that one of the sureties was already upon more than two bonds; and the writ was granted compelling the respondent to reinstate the case. The case of *People v. Roby* was cited in that case in support of the proposition that intent was not an ingredient of the offense.

These regulations are under the police power of the State. Undoubtedly it was competent for the legislature to prohibit the sale of adulterated articles of food and drink. The police power of the State extends to the protection of the health as well as of the lives and property of the citizens. Generally it is for the legislature to determine what laws and regulations are needed to protect the public health and secure the public comfort and safety. If it passes an act ostensibly for the public health and thereby destroys or takes away the property of the citizen or interferes with his liberty it is for the courts to determine whether it relates to and is appropriate to promote such public health. Under the police power the conduct of individuals and the use of property may be regulated so as to interfere to some extent with the freedom of the one and the enjoyment of the other. It cannot be doubted that the legislature intended by this act to protect the public against the harmful consequences of sales of adulterated food, and to the end that its purpose might not be defeated to require the seller at his peril to know that the article which he offers for sale is not adulterated.

As was said by the supreme court of Ohio, in *State v. Kelly*, 54 Ohio St. 166: "If this statute had imposed upon the State the burden of proving * * * his knowledge of its adulteration, it would thereby have defeated its declared purpose."

In *State v. Smith*, 10 R. I. 260, the court, in speaking of the offense of selling adulterated milk, said: "Counsel for defendant asked the court to charge that there must be evidence of a guilty intent on the part of the defendant and of a guilty knowledge in order to convict him. Our statute in that provision of it, under which this indictment was found does not essentially differ from the statute of Massachusetts, and there previous to the enactment of our statute the supreme court had determined that a person might be convicted although he had no knowledge of the adulteration; the intent of the legislature being that the seller of milk should take upon himself the risk of knowing that the article he offers for sale is not adulterated."

Statutes in many states have been passed providing that whoever sells, or keeps or offers for sale adulterated milk, or milk to which water or other foreign substance has been added shall be punished, etc. Under these statutes it has been decided many times that the risk is upon the seller of knowing that the article he offers for sale is not adulterated, and that it is not necessary in an indictment under such a statute to allege or prove criminal intent or guilty knowledge.

Com. v. Smith, 103 Mass., 444.

Com. v. Warren, 160 Mass., 533.

People v. Clipperly, 101 N. Y., 634.

The same rule that no criminal intent is necessary has been held to apply under an act forbidding the sale of oleomargarine or other imitations of dairy products, unless express notice be given to the purchaser.

Bayles v. Newton, 50 N. J. L., 549.

Com. v. Gray, 150 Mass., 327.

The English rule is in keeping with the doctrine in this country on this subject.

Roberts v. Egerton, L. R., 9 Q. B., 494.

The statute not requiring knowledge on the part of the seller to make the offense complete, we are satisfied that the conviction must be sustained. No case has been cited, and we are not able to find one, where a contrary doctrine is laid down. The act may work hardship in many cases; but that question is one to be addressed to the legislature and not to the courts. As we have said, it was within the power of the legislature to pass the act making it an offense punishable with fine and imprisonment to sell adulterated food or drink, although the person selling the same has no knowledge that it is adulterated. Under this statute one making sales must do so at his peril.

The conviction is affirmed.

Grant, J., did not sit. The other justices concurred.

PEOPLE v. WORDEN GROCER CO.

(Opinion filed December 6, 1898.)

Constitutional Law—Act to Prevent Sale of Adulterated Vinegar—Complaint—Reasonableness of Statute—Defense.

1. The title to an act reading "An act in relation to the manufacture and sale of vinegar, and to repeal Act No. 224 of the Public Acts of 1889, approved, etc.," held broad enough to support an enactment to prevent deception in the sale of vinegar or to prevent adulteration of vinegar.
2. A conviction for a sale of "fermented cider vinegar," which was not up to the standard prescribed by Act No. 71, Public Acts of 1897, may be had under a complaint drawn under section 2 of the act.
3. The question as to whether the requirements of an act passed to prevent the sale of adulterated vinegar are such as to render the act unreasonable, cannot be determined by the courts and does not raise a question of fact for determination by a jury.
4. Where a sample of vinegar is taken from a dealer for the purpose of testing it to see if it conforms to the standard required by law it is not necessary that a sample be left with the dealer.
5. A prosecution for a sale of vinegar in violation of Act No. 71, Public Acts of 1897, cannot be defended on the ground that the person so manufacturing or selling vinegar below the standard has no knowledge that it is not within the standard prescribed.

Error to the circuit court of Kent county; Allen C. Adsit, J.

Appeal of the Worden Grocer Co. from a conviction of a violation of Act No. 71, Public Acts of 1897. Affirmed.

Frank A. Rodgers, Prosecuting Attorney; Benn M. Corwin, Assistant Prosecuting Attorney, for the people.

Rood & Hindman, for respondent.

Long, J.: The complaint in this cause charges that the defendant: "On February 5, 1898, did unlawfully sell and deliver to John T. Owens

of Benton Harbor, Michigan, a large quantity, to wit: One barrel of vinegar which was not then and there in compliance with the provisions of Act No. 71, Public Acts, 1897, in this, viz.: That said vinegar was sold as "fermented cider vinegar" and branded as such; that said vinegar contained less than one and three-fourths per cent by weight upon full evaporation (at the temperature of boiling water) of solids contained in the fruit from which said vinegar is fermented, to wit: One and fifty-one one-hundredths per cent of solids; and said vinegar contained less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar was manufactured, to wit: Eight one-hundredths of one per cent of ash or mineral matter, against the form of the statute in such case made and provided," etc.

The cause was commenced in the police court, and, being removed to the circuit, came on to be heard before a jury. The defendant refused to plead, and counsel for defendant thereupon made a motion to quash the complaint and summons for several reasons which will hereafter be discussed. The court upon the trial directed a verdict of guilty, and the cause comes to this court on exceptions before judgment.

The title of the act reads: "An act in relation to the manufacture and sale of vinegar, and to repeal Act No. 224 of the Public Acts of 1889, approved," etc. Sections one and two of the act being the sections in question, provide:

"Section 1. The People of the State of Michigan enact, That no person shall manufacture for sale, offer or expose for sale, sell or deliver, or have in his possession with intent to sell or deliver, any vinegar not in compliance with the provisions of this act. No vinegar shall be sold as apple, orchard or cider vinegar, which is not the legitimate product of pure apple juice, known as apple cider or vinegar not made exclusively of said apple cider or vinegar into which foreign substance, drugs or acids have been introduced, as may appear upon proper test, and upon said test, shall contain not less than one and three-fourths per cent, by weight, of cider vinegar solids upon full evaporation at the temperature of boiling water.

"Section 2. All vinegar made by fermentation and oxidation without the intervention of distillation shall be branded 'fermented vinegar' with the name of the fruit or substance from which the same is made. And all vinegar made wholly or in part from distilled liquor shall be branded 'distilled vinegar,' and all of such distilled vinegar shall be free from coloring matter added during or after distillation and from color other from that imparted to it by distillation. And all fermented vinegar not distilled shall contain not less than one and three-fourths per cent, by weight, upon full evaporation (at the temperature of boiling water) of solids, contained in the fruit or grain from which said vinegar is fermented, and said vinegar shall contain not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. And all vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made, and shall contain no foreign substance and shall contain not less than four per cent, by weight, of absolute acetic acid."

It appears by the testimony that the defendant, a Michigan corporation doing business at Grand Rapids, on February 5, 1898, sold a barrel of vinegar to one John T. Owens of Benton Harbor. The sale is admitted. A sample of the vinegar was taken from this barrel and analyzed by the State Analyst, Mr. Fred H. Borradaile. The correctness of this analysis is not disputed. This analysis showed that the vinegar did not comply with the requirements of the statute in that it did not

contain the amount of solids nor the amount of ash or mineral matter required.

The contentions made by counsel for defendant mostly relate to the validity of the act.

1. It is contended that the title to the act does not express any object; that the act was intended to prevent deception in the sale of vinegar or to prevent adulteration of vinegar, but that no such object is expressed in the title; and that the act is therefore in conflict with section 20 of article 4, of the constitution of this State, which provides that: "No law shall embrace more than one object, which shall be expressed in its title."

We think this contention sufficiently answered by what was said by this court in *Soukup v. Van Dyke*, 109 Mich. 681. There the title was: "An act relative to justices' courts in the city of Grand Rapids." It was said: "The title is sufficient if it fairly and reasonably announces the object and that is a single one. If this requirement be observed, the legislature must determine for itself how broad and comprehensive shall be the object of a statute and how much particularity shall be employed in the title in defining it."

In *People v. Kelly*, 99 Mich. 82, the title under discussion was: "An act relative to disorderly persons, and to repeal," etc.

See also:

State v. County Judges, 2 Iowa, 280.

McAunich v. The Miss. & Mo. R. R. Co., 20 Iowa, 342.

2. Counsel contend that the complaint being drawn under section two of the act, no conviction can follow; that if any violation of the law be found, it is of section one and not of section two of the act; that, therefore, the complaint was drawn under the wrong section.

This contention cannot be sustained. It is plain from the reading of these sections that the legislature intended that all fermented vinegar should come up to the required standard, whether made from fruit or grain.

3. The defendant contends that the act is unreasonable and therefore void as beyond the police power of the State, in that the test for cider vinegar in regard to solids is arbitrary, unscientific and not calculated to accomplish the end sought by the legislature, viz.: To protect the public health against spurious vinegar; that such test is no test, because:

a. Said solids and ash are indifferent ingredients of vinegar from a hygienic standpoint.

b. Their comparative absence or presence is not an essential ingredient of pure apple cider vinegar.

c. A vinegar can be manufactured which will satisfy the requirements of the statute and yet contain no materials from apples or the product of apples.

d. A pure apple cider vinegar is frequently made which is below the requirements of the statute in solids and ash.

e. The less proportion of solids is a proof of greater purity in the vinegar and of its better keeping qualities.

These questions might very properly be addressed to the legislature,

but are matters with which the court has nothing to do. It is not a part of the functions of the court to investigate the facts entering into questions of public policy merely. Under our system that power is lodged in the legislative branch of the government. It belongs to that branch to determine primarily what measures are appropriate or needful for the protection of the public morals, the public health or the public safety.

Barton v. McWhinney, 85 Ind., 481.

Mugler v. Kansas, 123 U. S., 660.

Powell v. Pennsylvania, 127 U. S., 685.

In *People v. Snowberger*, 113 Mich. 92, it was said by this court: "The act may work hardship in many cases, but that question is one to be addressed to the legislature and not to the courts."

The question of the reasonableness of the acts found in many states relative to the sale of milk below a certain standard has been frequently raised in the courts, and the acts upheld.

In *Com. v. Evans*, 132 Mass. 11, the court passing upon such a statute said: "The intention of the legislature and the practical operation of this section in connection with the third section is to provide that it shall be unlawful to sell milk containing less than thirteen per centum of milk solids. This belongs to the class of police regulations designated to prevent frauds and to protect the health of the people, which it is within the constitutional power of the legislature to enact."

In *State v. Smyth*, 14 R. I. 100, the court said: "It was the purpose of the statute to prohibit, not only the dealing in milk which had been adulterated, but also in milk of such inferior quality as to fall below the standard named in section three. It is equally a fraud on the buyer, whether the milk which he buys was originally good and has been deteriorated by the addition of water or whether in its natural state it is so poor that it contains the same proportion of water as that which has been adulterated." See also:

State v. Newton, 45 N. J. L., 469.

Bertholf v. O'Reilly, 74 N. Y., 509.

State v. Campbell, 64 N. H., 403.

10 Am. St. Rep., 419.

But counsel contend that the reasonableness of this act is a question of fact for the jury to determine from the expert chemical evidence.

This question is neither for the court nor the jury to determine. In *People v. Clipperly*, 101 N. Y. 634, that very question was discussed and decided adversely to the claim here. It was said: "The defendant takes the broader ground that the legislature cannot under the constitution prohibit the sale of milk drawn from healthy cows which in its natural state falls below standard fixed by the act, unless such milk, or the articles made from it, are in fact unwholesome or dangerous to public health. How is that question of fact to be determined? The court cannot take judicial notice whether milk below the standard is or is not unwholesome or dangerous to public health. Is that to be a question for the jury? If so, the court must charge a jury in each case that if they find milk below that standard to be unwholesome, then the statute is constitutional; if they find it to be wholesome, then the statute is unconstitutional. Evidently a constitutional question cannot be

settled, or rather, unsettled in that way. The constitutionality would vary with the varying judgments of juries."

In the emery wheel case before us, in *People v. Smith*, 108 Mich., p. 534, a somewhat similar question was discussed. It was said: "If the courts find the plain provisions of the constitution violated, or if it can be said that the act is not within the rule of necessity in view of facts of which judicial notice may be taken, then the act must fall; otherwise it should stand."

See also:

People v. Girard, 145 N. Y., 109.
(45 Am. St. Rep. 595.)

4. Counsel also contend that defendant was not allowed, nor could it obtain, a sample of the vinegar in question for analysis, and was deprived of the right to produce evidence as to the amount of solids in the vinegar; and was thus deprived of property without due process of law.

The record shows that the defendant was not prevented from getting a sample of the vinegar by any person interested in the prosecution of the suit. The record shows that the only effort it made to get such sample was a letter written to Mr. Owens who had bought and paid for the vinegar, requesting him to return it, to which the defendant received no reply, and it does not appear that Mr. Owens had any of the vinegar left at that time. No sample was left with the defendant by the prosecution; nor was this necessary.

Com. v. Coleman, 157 Mass., 460.

5. This statute forbids the manufacture and sale of vinegar not in compliance therewith; and persons manufacturing or selling vinegar below the standard do so at their peril. It is no defense that the person so manufacturing or selling vinegar below the standard has no knowledge that it is not within the standard prescribed.

People v. Snowberger, 113 Mich., 86; 71 N. W. R., 497.

We have examined the other questions raised, but do not deem it necessary to discuss them. They relate mostly to offers of testimony which the court below ruled out; and, we think, properly.

The testimony was uncontradicted that the vinegar sold was not in compliance with the statute. The sale was admitted.

The court was not in error in directing the verdict. The conviction must be affirmed.

Grant, C. J., did not sit. The other justices concurred.

PEOPLE v. DETTENTHALER.

GROSVENOR v. JACKSON CIRCUIT JUDGE.

(Opinions filed December 6, 1898.)

Constitutional Law—Passage of Act Without Enactment Clause—Constitutional Provision Mandatory—Addition of Clause by Governor—Act 76, Laws of 1897, Invalid.

1. The provision in the Michigan State constitution, found in Sec. 48 of Art. IV, that all laws shall be styled, "The People of the State of Michigan enact," is mandatory and the passage of an act without the enactment clause renders the act invalid.
2. The addition of the enacting clause by the Governor before affixing his signature will not render the law valid which was passed without an enactment clause.
3. Act No. 76, Laws of 1897, being "An act to prevent deception in the manufacture and sale of imitation butter" held to be invalid because of the passage of the act without an enactment clause was not rendered valid by the addition of such clause by the Governor before affixing his signature to the act.

Error to the superior court of Grand Rapids; Edwin A. Burlingame, judge.

Exceptions taken by Frank J. Dettenthaler from a conviction of a violation of the pure food law.—Reversed and no new trial.

Frank D. Rodgers, Prosecuting Attorney, (Rodgers, McDonald & Corwin of counsel), for the people.

Rood & Hindman and E. F. Sweet, for respondent.

Certiorari by Elliot O. Grosvenor, Dairy and Food Commissioner, to review the action of the Jackson circuit judge in denying a mandamus. Affirmed.

John G. Hawley and Benn M. Corwin, for relator.

Rood & Hindman and E. F. Sweet, for respondent.

Hooker, J.: These cases involve the validity of Act No. 76, Public Acts, 1897, which is as follows:

"An act to prevent deception in the manufacture and sale of imitation butter."

Section 1. The People of the State of Michigan enact, That no person, by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substances or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream from the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer

of its real character, free from coloration or ingredient, that causes it to look like butter.

Sec. 2. Whoever violates any of the provisions of section one (1) of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail, or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

Approved April 15, 1897.

The evidence in the first entitled cause shows that the defendant was convicted of the alleged offense of selling oleomargarine in contravention of this act.

In the other a complaint was made of a similar act to a justice, who refused to issue the warrant, and on application the circuit court denied a mandamus to compel it. The cases raise substantially the same questions, and were argued, and will be considered together. The validity of the law is questioned. The record shows that this was a senate bill and passed the senate without the constitutional enacting clause. The records of the house show that the bill was reported by the committee on agriculture and the committee of the whole, without amendment, and with the recommendation that it be passed. Under the head of "third reading of bills upon passage," the record of the house shows that "pending the third reading of the bill, Mr. Chamberlain moved that the bill be recommitted to the committee of the whole, which motion did not prevail. The bill having been read a third time, and the question being upon its passage pending the taking of the vote, Mr. Graham demanded the previous question. The demand was seconded. The question being, 'Shall the main question be now put?' The same was ordered. The bill was then passed, a majority of all the members elect voting therefor, by yeas and nays, as follows: * * * yeas 56, nays 19." As this is the only time the bill was before the house, we must find that the bill passed the house without an enacting clause, unless the contrary can be shown by other evidence. Counsel undertook to show that it was amended in this particular, by the records of the senate, and the testimony of the clerk of the house. The evidence is in brief, that previous to the passage of the bill in the house the clerk noticed the absence of the enacting clause, and brought it to the attention of the house, and said that he would enter one, and accordingly wrote the words in the original bill, i. e., the one which was then before the house. He did not testify that the house took any action upon it, or that any record was made of it.

The senate record shows that the bill was subsequently returned to the senate, accompanied by a letter from the clerk of the house, reading as follows:

"House of Representatives,
"Lansing, April 7, 1897.

"To the President of the Senate:

"Sir—I am instructed by the House to return to the Senate the following bill: Senate bill No. 6, file No. 24, entitled

"'A bill to prevent deception in the manufacture and sale of imitation butter' and to inform the Senate that the House has amended the same as follows: By

inserting in line 1, Section 1, after the words 'Section 1,' the words 'The People of the State of Michigan enact.'

Very respectfully,

"LEWIS M. MILLER,

"Clerk of the House of Representatives.

"In the passage of which, as thus amended, the House has concurred by a majority vote of all the members elect."

It further appears that the senate concurred in such amendment.

We must determine, therefore, whether the house is shown to have amended the bill by inserting an enacting clause and if not whether the law is valid without it.

The most that can be claimed is that there is oral testimony, that the clerk announced its absence and stated that he would supply it. Inferentially perhaps we may say that there was no objection made, but the evidence is silent as to what, if anything, occurred. There is nothing but this inference of silence which imports acquiescence in the amendment. There is nothing to show definite action by the house which alone had power to amend the bill before it. So that if the clause is essential to the validity of the act we need not discuss the propriety of admitting parol evidence to prove an amendment which should be shown by the record if one was authorized.

See Attorney General v. Rice, 64 Mich., 391.

Hart v. McElroy, 72 Mich., 446.

Sackrider v. Supervisors, 79 Mich., 66.

Is the constitutional enacting clause a requisite to a valid law? This must depend upon whether the constitutional provision is to be considered a mandatory provision or directory merely.

See Constitution, Art. IV., Sec. 48.

Among the authorities cited by the relator in support of his contention, is that of Swann v. Buck, 40 Miss. 268. The constitutional provision is similar to ours, and it was held that a substantial compliance was sufficient. In that case the style of the resolution was: "Resolved by the legislature of the State of Mississippi." The court was unable to discover a previous judicial decision of the question, but quoted Mr. Cushing to the effect that the prescribed "form must be strictly pursued, and that no equivalent language will be sufficient," and while declining to accept his rule said: "It is necessary that every law should show on its face the authority by which it is adopted, and promulgated, and that it should clearly appear that it is intended by the legislative power that enacts it that it should take effect as a law. These conditions being fulfilled all that is absolutely necessary is expressed. The word 'resolved' is as potent to declare the legislative will, as the word 'enacted.'"

The case of McPherson v. Leonard, 29 Md. 377, held that the provision of the constitution of Maryland was directory, and that the omission of the words, "by the general assembly of Maryland," did not render the law invalid. The question appears to have been treated as a new one.

The case of Cape Girardeau v. Riley, 52 Mo. 427, follows the Maryland case, in holding the provision directory; the court saying that after

diligent search, no case holding to the contrary had been found. In this case, like the one before us, the entire enacting clause was wanting. In this connection we may add that previous decisions of the same court, holding the provision that writs should run in the name of the state, was directory, were given weight. In our State a contrary holding will be found.

See *Forbes v. Darling*, 94 Mich., 621.

There are, however, cases which take a contrary view of the law, and adhere to the doctrine asserted by Mr. Cushing, and the late Mr. Justice Cooley, in his work on constitutional limitations, 6 Ed., p. 93, viz.:

"But the courts tread upon very dangerous ground when they venture to apply the rules which distinguish directory and mandatory statutes to the provisions of a constitution. Constitutions do not usually undertake to prescribe mere rules of proceeding, except when such rules are looked upon as essential to the thing to be done; and they must then be regarded in the light of limitations upon the power to be exercised. It is the province of an instrument of this solemn and permanent character to establish those fundamental maxims and fix those unvarying rules by which all departments of the government must at all times shape their conduct, and if it descends to prescribing mere rules of order in unessential matters, it is lowering the proper dignity of such an instrument, and usurping the proper province of ordinary legislation. We are not, therefore, to expect to find a constitutional provision which the people, in adopting it, have not regarded as of high importance, and worthy to be embraced in an instrument, which, for a time at least, is to control alike the government and the governed, and to form a standard by which is to be measured the power which can be exercised as well by the delegate as by the sovereign people themselves. If directions are given respecting the times or modes of proceeding in which a power should be exercised, there is at least a strong presumption that the people designed it should be exercised, in that time and mode only; and we impute to the people a want of due appreciation of the purpose and proper province of such an instrument, when we infer that such directions are given to any other end. Especially when, as has already been said, it is but fair to presume that the people in their constitution have expressed themselves in careful and measured terms, corresponding with the immense importance of the powers delegated, and with a view to leave as little as possible to implication."

There are some cases, however, where the doctrine of directory statutes has been applied to constitutional provisions, but they are so plainly at variance with the weight of authority upon the precise points considered that we feel warranted in saying that the judicial decisions as they now stand do not sanction the application.

The question arose in Washington territory over a law fixing the seat of government, and the opinion of Cushing was quoted and followed. 1 Wash. Ter. 116. The case of *Nevada v. Rogers*, 10 Nevada 250, decided in 1875, did the same. An extended discussion of the subject will be found in that case, in support of the proposition that the language of the constitution should be literally followed.

The opinion concludes with the following pertinent and emphatic language:

"Our constitution expressly provides that the enacting clause of every law shall be 'The People of the State of Nevada, represented in senate and assembly, do enact as follows.' This language is susceptible of but one interpretation. There is no doubtful meaning as to the intention. It is, in our judgment, an imperative mandate of the people in their sovereign capacity to the legislature,

requiring that all laws to be binding upon them shall, upon their face, express the authority by which they were enacted, and as this act comes to us without such authority appearing upon its face, it is not a law."

The case of *State v. Patterson*, 98 N. C. 662, is strong in its condemnation of the practice of treating constitutional requirements as directory. The case of *Powell v. Jackson*, 51 Mich. 130, is not in point, as the bill was duly and seasonably amended, if we may accept the statement of the briefs of the counsel and the syllabus.

The trend of the weight of the authority is in our opinion against the relator's contention.

It is urged with some plausibility that the insertion of this provision previous to the signature by the Governor is a sufficient compliance with the constitution, from which we understand the claim to be made that although the enacting clause was wanting when the bill came to the Governor it might have been supplied by him. But it is thought that this proposition is tenable only upon the assumption that the constitutional provision is directory merely. The Governor has no power to make laws. The legislative power is in no part vested in him, being by Sec. 1, Article IV, of the constitution, vested in the senate and house of representatives. It is not the design of the constitution that he should legislate. His office is a check upon the legislature and he may compel a reconsideration of a bill by seasonably returning it to the appropriate house with his objections to it, and when the legislature has adjourned his neglect to sign it prevents it from becoming a law, but he has not the slightest power in framing the law. Indeed, it is a fundamental principal in American constitutions that the executive shall not make laws. The following language from the opinion in the case of *State of Nevada v. Rogers*, 10 Neb. 250, is apropos to this subject:

"Without the concurrence of the senate the people have no power to enact any law. Every person at all familiar with the practice of legislative bodies is aware that one of the most common methods adopted to kill a bill and prevent its becoming a law, is for a member to move to strike out the enacting clause. If such motion is carried the bill is lost. Can it be seriously contended that such a bill, with its head cut off, could thereafter by any legislative action become a law? Certainly not. The certificates of the proper officers of the Senate and assembly, that such an act was passed in their respective houses, do not, and could not impart vitality to any act, which, upon its face, failed to express the authority by which it was enacted."

This being so, the only justification for the insertion of the enacting clause by the Governor is to be found in the assumption that it is a clerical omission of an unimportant matter and it might as well be held that one of the houses, or a clerk, or even the printer of the laws, might make the correction, as that the Governor might do it.

Some of the states have sustained laws without enacting clauses, but we do not know of one that has made their validity depend upon the unauthorized action of some officer or person. They have preferred to rest their action upon the well recognized distinction between mandatory and directory provisions. If the provision is mandatory that the law shall have a prescribed style and the making of laws is confined to the legislative branch of the government, it cannot be consistently held that omissions of essential parts of a law may be supplied and

corrections made by persons without authority; and the public necessities should be much greater than in the present case, before such a proposition should be seriously considered. If on the other hand there is warrant for treating the provision as directory, a much less dangerous precedent is established. But as has been shown, the weight of authority forbids it, and in our opinion it will be an unfortunate day for constitutional rights when courts begin the insidious process of undermining constitutions by holding unambiguous provisions and limitations to be directory merely, to be disregarded at pleasure. In the present case it will be much better that the legislature shall correct its mistake, than that the courts shall sanction the irregular correction.

We are therefore constrained to hold that the law under discussion is void, and in the certiorari case the order is affirmed, in that of Detten-thaler the conviction is reversed and no new trial ordered. The other justices concurred.

GROSVENOR v. DUFFY.

(Opinion filed September 18, 1899.)

Pure Food Law—Sale of Oleomargarine Colored to Imitate Butter—Constitutionality of Act.

The sale of oleomargarine colored with a harmless substance to imitate June butter, but which is sold and purchased as oleomargarine, is not in violation of section 3 of Act 118 of the Public Acts of 1897, being an act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink.

Certiorari to review the action of the Washtenaw circuit judge in refusing the application of Elliot O. Grosvenor, Dairy and Food Commissioner, for mandamus to compel John L. Duffy, justice of the peace, to issue a warrant. Affirmed.

Smedley & Corwin, for relator.

John J. Speed and J. P. Lee, for respondent.

The relator presented to a justice of the peace a complaint in writing, charging that "Casper Rinsey did unlawfully offer and expose for sale, and did unlawfully sell and deliver to said Elliot O. Grosvenor, a large quantity, to wit, one pound of oleomargarine, which was then and there an article of food intended to be eaten by man, and which was then and there adulterated within the meaning of Act No. 193 of the Public Acts of Michigan for the year 1895, as amended by Act No. 118 of the Public Acts of Michigan for the year 1897, in this, to wit: that said oleomargarine was then and there an imitation of another article of food, to wit: an imitation of a rich June butter; and said oleomargarine had been and was then and there colored, whereby inferiority was concealed and by which means it was made to appear better and of greater value than it really was, to wit, in this: That it was thereby made to appear like butter of a grade which was then and there of a greater value

than the said oleomargarine; that the said oleomargarine was labeled 'oleomargarine' and stamped with the seller's name; and that the tub and wrapper which contained the same bore the name and address of the manufacturer and was distinctly labeled oleomargarine."

"Said complainant on his oath aforesaid, further says, that he called for oleomargarine, and that the said oleomargarine was sold to him as oleomargarine the same as to an ordinary customer, freely and without objection, and that for this reason he did not take the steps required by section 6, Act No. 154 of the Public Acts of Michigan for the year 1897."

The justice refused to entertain the complaint and issue a warrant, whereupon the relator applied to the circuit court for Washtenaw county for the writ of mandamus to compel the justice to issue a warrant and proceed to hear the case. The circuit court refused the writ and the case is brought to this court by certiorari for review.

Grant, C. J. (after stating the facts). The title of the act reads "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink." Sec. 3, as amended by Act No. 118, Public Acts of 1897, so far as it applies to this case, reads:

"An article shall be deemed to be adulterated within the meaning of this act: * * *

"Fourth—If it is an imitation of, or sold under the name of another article. * * *

"Sixth—If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is.

"Seventh—If it contains any added substance or ingredient which is poisonous or injurious to health: Provided, That nothing in this act shall prevent the coloring of pure butter: And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale, bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section."

It is not claimed that the sale made by Rinsey violates subdivision seven. The act charged in the complaint is neither adulteration, fraud nor deception under any definition of these words to be found in any dictionary. Adulteration is "the act of corrupting or debasing, the act of mixing something impure or spurious with something pure or genuine, or an inferior article with a superior one of the same kind."

Bouv., L. D., 126.
Century Dictionary.

Counsel do not urge that it comes within the word "fraud" or "deceit." Neither is it urged that the article is made to appear of greater value than it really is. It is not claimed that the coloring matter used is in the least deleterious. The law permits its use to color butter. Counsel rely upon *People v. Snowberger*, 113 Mich. 86. That case is not in point. The gravamen of the offense there was that the article

of food was damaged, inferior, its inferiority concealed, and it was made to appear of greater value than it really was.

This brings us to the only question we need to determine, viz.: Is the title to the act broad enough to include the sale complained of? Would any person reading the title to the bill in the legislative journals, or elsewhere, suppose that the bill would make criminal an act which in itself was entirely harmless, honest, innocent and contained no element of wrong-doing? Or that it would change the well known definition of a word so as to include within it things which were in no sense akin to it and which could only be included in it by the most arbitrary legislative enactments? Would a manufacturer of, or dealer in butter or oleomargarine, be notified by the title that the harmless coloring of either was not only to be prohibited but to be punished by fine or imprisonment or both? There can be but one answer to these questions. When the legislature attempts to change definitions and to make acts criminal which per se are innocent and contain no element of wrong, there must be something in the title to show such purpose or object under Sec. 20, Art. 4 of the constitution. The title contains not even an intimation that an entirely innocent act is to be made a crime. It follows that this part of the act is void.

Bissel v. Wayne Probate Judge, 58 Mich., 237.

Northwestern M'fg Co. v. Wayne Circuit Judge, Id., 381.

McKellar v. Detroit, 57 Mich., 158.

This statute is assailed as unconstitutional upon other grounds. This disposal of the case renders it unnecessary to discuss them. How far the legislature may go, under the police power inherent in the State in prohibiting and punishing acts which in themselves are perfectly harmless, would be an interesting subject of inquiry, but as it is not necessary to a disposal of the case we decline to enter upon it.

Judgment affirmed. The other justices concurred.

PEOPLE v. SKILLMAN.

(Opinion filed March 4, 1902.)

Pure Food Law—Section 5022 C. L. Construed—Action Against Traveling Salesman.

A traveling salesman for a wholesale grocery firm, residing out of the State, took an order in this State for pure fruit jelly and forwarded the order to his employers. The order was filled with imitation fruit jelly. Information was filed against the salesman under section 5022 C. L., regulating the manufacture and sale of imitation fruit jellies. *Held*, That respondent was not guilty of violating the terms of the statute.

Error to the circuit court for Muskegon county. Fred J. Russell, judge.

Appeal of John Skillman from a conviction under the pure food law. New trial ordered.

Chas. B. Cross, Prosecuting Attorney, for the people.

Elliot O. Grosvenor and Smedley & Corwin, for respondent.

Moore, J.: An information was filed against the respondent which, omitting the formal parts, reads as follows: "That one John Skillman heretofore, to wit, on the sixteenth day of September, A. D. 1901, at the city of Muskegon, in the county of Muskegon aforesaid, did unlawfully offer for sale and did sell to Albert Towle a large quantity, to wit: a certain compound under the name of Quince Jelly which was then and there adulterated within the meaning of the Act No. 193 of the Public Acts of the State of Michigan of the year 1895, as amended by Act No. 118 of the Public Acts of the State of Michigan of the year 1897, as amended by Act No. 117 of the Public Acts of the State of Michigan of the year 1899, in this, to wit: That said compound was then and there made and composed in part of glucose, starch and other substances, and was then and there colored in imitation of fruit jelly contrary to the form of the statute."

After the testimony was all in, a motion was made asking the judge, for various reasons, to direct a verdict in favor of respondent. This motion was overruled. The case was submitted to the jury which returned a verdict of guilty.

A great many errors are assigned. We think some of them which we shall discuss are well taken, but as the case if ever tried again, will not present the same questions now presented by counsel we deem it unnecessary to pass upon all the questions argued by them in the briefs.

To sustain the case of the people testimony in substance as follows was introduced: It was shown the respondent had for some years been a traveling salesman in the employ of Reid, Murdock & Company of Chicago, that he solicited an order from Mr. Towle, a grocer in Muskegon, that Mr. Towle gave him an order for a case of assorted pure fruit jelly. Mr. Skillman did not have the goods with him, but reduced the order to writing in the presence of Mr. Towle at his store, and forwarded it to the house in Chicago. It is as follows:

"Reid, Murdock & Co., Chicago,
Sept. 12, 1901.

Name: Albert Towle.

Town: Muskegon.

State: Michigan.

Ship by Barry Line.

Salesman: Skillman.

1 c P. F. Jelly Med. Asst.....	100
1 c P. F. Jelly Med. Currant	100
60 days."	

"1 c P. F. Jelly Med. Asst." was explained to mean one case pure fruit jelly medium size assorted glasses. Mr. Towle testified Mr. Skillman claimed it was pure fruit jelly for which he took the order, and that was what he intended to buy. It was not shown that respondent had anything further to do with the transaction than as above stated. Later a case of goods was received from Reid, Murdock & Company and testimony was given tending to show that a tumbler of this jelly was sold to Mr. Bennett, inspector of the Dairy and Food Department of Michigan, and by him forwarded to the State Analyst, where it is claimed upon analysis it was shown to be a mixture of fruit juice, glucose, starch and coloring matter. Upon the cross examination of Mr. Towle the following occurred:

"Q. Did you give Mr. Skillman more than one order for fruit jelly about this time? A. Well, he had two or three orders I think, two at least.

"Q. Two orders? A. One of them might have been ordered by mail.

"Q. Now you received two consignments of fruit jelly from the orders you had given to Mr. Skillman? A. I think so, yes, sir.

"Q. Upon which one of these orders did you receive this particular tumbler of jelly that you afterwards sold to Mr. Bennett? A. I couldn't say. The one that he bought was out of that order I think. (Witness pointing to order exhibited.)"

The defense claimed that the label "pure fruit jelly" placed upon the tumbler analyzed was put there by mistake. It was their claim that Reid, Murdock & Company dealt in two kinds of jelly, those made out of pure fruit and those made in imitation of pure fruit, and that when the imitation was sold in Michigan and certain other states their instructions were to label them "imitation," and that these instructions were furnished in writing to their agents, including the respondent, and they offered testimony tending to prove this claim. The written instructions were also offered in evidence, but with the testimony offered were excluded by the court.

Among other requests offered by the respondent was the following:

"Under the undisputed evidence in this case there is nothing to show that the respondent offered to sell any jelly in violation of any statute of this State, but, on the contrary, it is shown that respondent offered to sell strictly pure fruit jelly and sent such an order to Reid, Murdock & Company of Chicago, Illinois, and the charge in the information for selling and offering to sell adulterated jelly is not sustained by the evidence, and your verdict should be not guilty."

The judge refused to give this request, but charged the jury, "It is recognized by the legislators and is a matter of common knowledge that many of the wholesalers that are doing business in Michigan are not residents of this State, so the legislature saw fit to make a law where a man solicited the sale of pure jellies, took an order for the sale of pure jellies, and in response to that order and offer, a different class of goods was furnished, that the party should be guilty of violating this particular law. In other words, instead of that order or offer and the furnishing of goods delivered to the party by a party who might be a non-resident of the State, that it should relate to the man who actually made the offer, the man who actually took the order for the furnishing of this particular article. The people claim that this is the matter in which this defendant here is liable."

This statement of the law is sought to be justified by *People v. Snowberger*, 113 Mich. 86, and *People v. Grocer Co.*, 118 Mich. 604, 71 N. W. 497, 67 Am. St. Rep. 449, 77 N. W. 315. A reference to these cases will show that the respondent in each of them admitted making the sale of the goods. In this case the respondent denies that he sold any goods coming within the provisions of the statute. Giving the only interpretation to the testimony as it appears in the record which can be fairly given to it shows Mr. Towle was solicited to give an order for pure fruit jelly. He gave such an order. It was reduced to writing and in the writing the jelly was described as pure fruit jelly. As before stated the only

connection of the respondent with the transaction as shown by the record is the taking of an order for an article not within the terms of the statute and forwarding it. This does not constitute an offense. It might as well be urged that if a traveling salesman takes an order for Michigan beet sugar and forwards a written order for such sugar, and if the house, instead of filling the order as written, sends glucose with a label upon the package containing it calling it Michigan beet sugar the salesman would be guilty of an offense. This we do not understand to be the law. Upon the case as made the circuit judge should have directed a verdict of not guilty. *People v. Howard*, 50 Mich. 242, 15 N. W., 101.

The verdict is set aside and a new trial ordered.

Long, J., did not sit. The other justices concurred.

THE PEOPLE v. MORSE.

(Opinion filed June 3, 1902.)

Pure Food Law—Sales by Agents—Criminal Responsibility for Acts of Principal.

1. A traveling salesman who in good faith takes an order for "pure pepper," which is filled by his principal with impure pepper, is not guilty of a violation of Public Acts 1895, No. 193, forbidding the sale of impure foods.
2. Public Acts 1895, No. 193 (Pure Food Laws) Sec. 17, providing that the taking of an order for future delivery of any of the articles covered by the "act shall be deemed a sale, within the meaning of the act," does not make an agent absolutely responsible for the acts of his principal in filling the orders taken by such agent, and an order by the agent which is filled by the principal as an entirety may be, under the act, a sale of impure food, as to the principal, and yet not such as to the agent.

Error to circuit court, Muskegon county; Fred J. Russell, judge.

John W. Morse was convicted of a violation of the pure food law, and he brings error. Reversed.

Underwood & Umlor, for appellant.

Chas. B. Cross, Prosecuting Attorney, and George S. Lovelace, Assistant Prosecuting Attorney, for the people.

Hooker, J.: The brief filed on behalf of the people states that the case is similar to that of *The People v. Skillman*, 8 Detroit Legal News, 1090, 89 N. W. 330, and in effect concedes that the case must be reversed if we adhere to our former decision.

The defendant took an order for some pepper, as and for pure pepper, to be shipped to a dealer in Muskegon, by defendant's principal, a wholesaler in Chicago. The pepper when sent was not pure.

It is insisted that the *Skillman* case is at variance with the weight of authority elsewhere, and contrary to our own cases, in which it is said that we have held that a guilty intent on the part of a vendor, is not essential to an offense, under the pure food law (Public Acts 1895, No. 193). It is further said that in the decision in the *Skillman* case,

section seventeen of the act must have been overlooked or considered unconstitutional.

The transaction in which the order was taken did not involve an immediate delivery of pepper, then and there present. It is not shown that the sample, if there was one, was the same as the pepper subsequently sent, or that it was in the least impure. If it be conceded that the agent acted in good faith, and we understand that it is not questioned, he took an order for pure goods, and in doing that certainly committed no offense. It is now urged that the exigencies of the enforcement of this law are such, that we should hold that this innocent and lawful action, may be made a crime by the subsequent act of the principal, either intentional or inadvertent, in departing from, instead of performing the contract which his agent had innocently made. We think this is not so, and we are also of the opinion that this does not necessarily do violence to section seventeen. This transaction, as an entirety, may have been a sale of impure pepper under the statute as to the principal and not as to the agent. If the order had been taken, with knowledge on the part of the agent of a practice to send impure pepper on such orders, a different question would be presented.

The judgment is reversed and a new trial ordered.

Long, J., did not sit. The other justices concurred.

PEOPLE v. ROTTER.

(Opinion filed June 24, 1902.)

Food—Oleomargarine Act—Constitutional Law—Statutes—Title—Object.

1. Public Acts 1901, No. 22, entitled "An act to prevent deception in the manufacture and sale of imitation butter," which in addition to forbidding sale of imitation butter, prohibits sales of colored oleomargarine, is not, on that account, open to the objection that the object is not expressed in the title, as required by Const. Art. 4, Sec. 20.
2. The act is not in contravention of the fourteenth amendment of the federal constitution.
3. The act is a valid exercise of the police power.

Error to circuit court, Emmet county; Frank Shepard, judge.

George W. Rotter was convicted of selling colored oleomargarine, and brings error. Affirmed.

Smedley & Corwin, Sears, Meagher & Whitney (James F. Meagher and Kay Wood, of counsel), for appellant.

Horace M. Oren, Attorney General, and Matthew F. Guinon, Prosecuting Attorney, for the people.

Hooker, C. J.: At its last session, the legislature passed an act under the title, "An act to prevent deception in the manufacture and sale of imitation butter." Public Acts 1901, No. 22.

Section 1 of said act provides that:

"No person, by himself or his agents or servants, shall render or manufac-

ture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter."

Section 2 prescribes a penalty for the violation of the act.

The defendant was a grocer in Emmet county, and is shown to have sold a package of oleomargarine, which by an analysis was proven to have contained artificial coloring matter, and that said oleomargarine was not made wholly from unadulterated milk or cream from the same, and that it was made in imitation of yellow butter, produced from unadulterated milk or cream from the same. The court was asked to direct a verdict of not guilty upon the grounds:

1st. That the object of the act was not expressed in the title, as required by section 20 of article 4 of the constitution of this State;

2d. That the act violates the fourteenth amendment of the constitution of the United States, and articles 6, section 32, of the constitution of this State;

3d. That it was not within the police power of the State.

The evidence conclusively shows that no deception was used in selling the oleomargarine, and there is nothing to indicate that there was any harmful ingredient therein, but that, on the contrary there was not such ingredient. The defendant was convicted, and the case is here on exceptions before sentence.

It is contended that the title to the act indicates that the act was designed to prevent deception in the manufacture and sale of imitation butter, while the act attempts to go further and prevent all sales of such colored oleomargarine.

If oleomargarine colored yellow, closely resembles yellow butter, made from milk or cream, it cannot reasonably be said not to resemble or imitate yellow butter. Butter is a well known commodity. From time immemorial it has had but one origin, viz.: from the churning of milk or cream. Whatever may be said of the possibility of making a product from other compounds than milk or cream that shall closely resemble or be chemically identical with butter, the world has but one understanding of what is meant by the word "butter," and we must assume that such is the sense in which our legislature used the term. Compiled Laws, Sec. 50, Sub. 1.

A fair inference from this statute is that the legislature undertook to prevent deception, by preventing the sale of any yellow oleomargarine, and it undertook to accomplish this by the most effective means, viz.: by prohibiting the coloring of oleomargarine yellow, thereby avoiding the embarrassment which would otherwise arise from the necessity of proving in each case, that deceit was used in selling it, as and for butter. We think this is fairly within the title, whatever must be said of the other points raised. We are referred to the case of *N. W. Mfg. Co. v. Chambers*, 58 Mich. 381, 25 N. W. 372, 55 Am. Rep. 693, as conclusive upon this question, in which case it is said that "all that could be done under such a title would be to prohibit and prevent sale of such articles

under false pretenses." We are of the opinion that this language is too restrictive, and that it is at variance with the settled doctrine in this State, that any provision, naturally calculated to accomplish the object expressed in the title may be included in the act.

See:

Soukup v. Van Dyke, 109 Mich., 681.

People v. Worden Grocer Co., 118 Mich., 607.

The case cited was rightly disposed of upon another ground, and it is possible that the language above quoted should be considered a dictum. Moreover, the cases are distinguishable for whereas, that act attempted to prevent all sales of imitation butter, and was therefore perhaps inconsistent with the title, which apparently contemplated lawful sales, the statute under consideration in the present case, does not prohibit sales of oleomargarine, which is not tainted with the prohibited ingredients.

It is unnecessary to discuss the other points at length for the reason that the uniform trend of judicial opinion is that such laws are valid.

State v. Meyers, 42 W. Va. 825; 35 L. R. A. 844.

New Hampshire v. Marshall, 1 L. R. A. 51.

Powell v. Penna, 127 U. S. 678.

People v. Armberg, 105 N. Y., 113.

Butler v. Chambers, 36 Minn. 69.

People v. Worden Grocer Co., 118 Mich. 604.

People v. Armsberg, 105 N. Y., 123.

State v. Crescent Creamery Co., 86 N. W. 107.

State v. Ball, 46 Atl. Rep. 50.

Commonwealth v. Van Dyke, 13 Pa. Sup. Ct. Rep. 484.

Commonwealth v. McCann, 14 Pa. Sup. Ct. Rep. 221.

Armour Packing Co. v. Snyder, 84 Fed. Rep. 136.

Cap. City Dairy Co. v. State, 22 Sup. Ct. Rep. 120.

Wright v. State, 41 Atl. Rep. 795.

We are of the opinion that the legislature had the power to pass this law, and its wisdom of policy is not for our consideration.

The judgment is affirmed and the court directed to sentence the defendant.

Long, J., did not sit. The other justices concurred.

PEOPLE v. PHILLIPS.

(Opinion filed Sept. 17, 1902.)

Food—Adulteration—Statutes—Oleomargarine—Yellow Butter.

1. The phrase "yellow butter," is used in Act No. 22, Acts 1901, making it an offense to sell or offer for sale oleomargarine colored in imitation of "yellow butter" made from pure milk or cream, of the same, means any butter produced from pure milk or cream thereof having a "preceptible shade" of yellow.

Error to circuit court, Kalamazoo county; John W. Adams, judge.

John W. Phillips was convicted of selling oleomargarine, in violation of Act No. 22, Acts 1901, and he brings error. Affirmed.

Frank E. Knappen and E. M. Irish, for appellant.

Sheridan F. Master, Prosecuting Attorney, and Dallas Boudeman, for the people.

Moore, J.: The respondent was convicted of having on hand with intent to sell, and offering for sale oleomargarine, colored in imitation of yellow butter, contrary to the provisions of Act No. 22 of the legislature, passed at the session of 1901.

It is claimed by respondent this law is unconstitutional and is an invalid law. That question was decided in the very recent case of *People v. Rotter*, against the contention of respondent, and need not be discussed here. It is urged as a matter of defense, and we quote from the brief of counsel, "that the statute is only aimed against the imitation of a substance which the legislature recognizes as yellow butter, and

1. The court should take judicial notice that all butter with a trace of yellow in it is not the yellow butter of commerce.

2. That if this is not true as a proposition of judicial notice, and the court cannot know it, then the respondent should have been allowed to prove, if he could, that there was such a usage of commerce.

3. That the statute is vague and indefinite in not defining the elements of the statutory crime it attempts to carve out of an act innocent per se, in that it gives no standard for determining what the color of yellow butter is that is not to be imitated."

The trial judge charged the jury upon that branch of the case as follows:

"It is not necessary in this case for the people to have proved that the respondent himself colored the oleomargarine if you find beyond a reasonable doubt that it was colored. The offense is just as complete, so far as this is concerned, if the respondent purchased oleomargarine colored, as above indicated. The offense as above stated consists of having the oleomargarine colored as before indicated, in his possession, with intent to sell the same, or in exposing it for sale; and if the respondent sold it in the same condition as he bought it, there would be no defense in this case. The respondent, gentlemen of the jury, is not charged in this information with selling this article; and if you find beyond a reasonable doubt he sold it as claimed by the people in the testimony offered, you may consider this fact on the question of whether respondent had or did not have the article in his possession for the purpose of selling it. And you must not consider it for any other purpose. If you find beyond a reasonable doubt that respondent did sell the article mentioned in the information to the parties claimed by the people, that would satisfy the statute upon the question of intent to sell. It is not necessary in this case to entitle the people to a conviction, that the oleomargarine should have been colored to represent any particular kind of yellow butter. That is, such yellow butter as the statute mentions, and as I have indicated to you the statute mentions. If the coloring was put into it, and by using such coloring the oleomargarine was in imitation of light yellow butter, such as the statute mentions, that is yellow butter produced from pure, unadulterated milk or cream from the same, the offense is committed just the same, as if it had been colored to represent darker yellow butter. If you find it to have been oleomargarine and was colored in such a manner as to be in imitation of any kind of yellow butter, that would satisfy the statute upon the requirement of the question of color. Yellow butter I define to be any butter produced from pure, unadulterated milk or cream of the same having a yellow color.

"It is necessary in order for the jury to convict the respondent, for you to find beyond all reasonable doubt that the article in the package sold was colored in imitation of yellow butter produced from pure, unadulterated milk or cream of the

same. If you find beyond a reasonable doubt under the testimony in this case that there was some coloring matter in this article still if you find that there was not enough coloring matter in this article to cause it to look like yellow butter having a perceptible shade of yellow, said butter having been produced from unadulterated milk or cream from the same, then you must acquit. But if you find beyond a reasonable doubt there was coloring matter in said article and sufficient coloring matter in said article and sufficient coloring matter therein to make it look like yellow butter, having any perceptible shade of yellow, said butter having been made from unadulterated milk or cream from the same, that would be sufficient so far as the requirement of the statute upon the question of coloration is concerned."

We think this was a proper construction of the language used in the statute.

The conviction is affirmed and the case remanded for further proceedings.

Long, J., did not sit. The other justices concurred.

PEOPLE v. JENNINGS.

(Opinion filed April 7, 1903.)

Adulteration of Food—Omission of Ingredients—Coloring Matter— Remarks of Court.

1. There not having been incorporated in the pure food law of 1895 (Public Acts of 1895, p. 358, No. 193), any specific formula for the manufacture of lemon extract, it is proper to resort to the United States Pharmacopoeia formula to determine of what lemon extracts consists.
2. The pure food law of 1895 (Public Acts 1895, p. 358, No. 193), is not intended to prevent manufacturers of articles of food from improving the same, so long as no infringement of the law or spirit of the act defining adulteration takes place.
3. The provisions of Comp. Laws, Sec. 5012, that an article shall be deemed adulterated, "second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it"—should be read together, and the provision first recited construed as prohibiting the substitution for an essential ingredient of any cheaper or inferior substances.
4. Comp. Laws, Sec. 5012, declaring that an article shall be deemed adulterated, "sixth, if it is colored * * * whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is," does not preclude the use of coloring matter not injurious to health in any way.
5. It is improper for the court to refer to expert testimony as "boughten testimony."

Exceptions from circuit court, Muskegon county; Fred J. Russell, judge.

Charles W. Jennings was convicted of violating the pure food law, and brings exceptions. Reversed.

Charles A. Blair, Attorney General, and Charles B. Cross, Prosecuting Attorney, (Cross, Lovelace and Ross, of counsel), for the people.

Knappen, Kleinhaus & Knappen and L. N. Keating, for defendant.

Montgomery, J.: This is a prosecution under the Pure Food Law, so called. The defendant was convicted under an information charging him with selling a compound as a lemon extract which was adulterated within the meaning of Act No. 193, P. A. 1895, and was a compound in imitation of extract of lemon. The respondent was convicted and brings the case up on exceptions before sentence.

The evidence on the trial introduced by the defendant tended to show that lemon oil contains from three to ten per cent citral, so called, and upwards of ninety per cent of so called turpenes; that these turpenes represent the oil property; that they are in reality the oil itself freed from the citral; that citral is the principal flavoring and odor-bearing property of lemon oil; that the tendency of turpenes in the oil of lemon is to deteriorate or become rancid by long standing, and that because of this the extract of spirits of lemon in which turpenes appear in usual quantities become turpentiney, both in smell and taste, and that for this reason it is undesirable to have turpenes present; that the turpenes have a biting taste, easily developing a turpentine taste, not the true flavor of the lemon fruit. There was also testimony tending to show that this fact created a demand for turpeneless oils and that turpeneless lemon oils had been manufactured and sold commercially for a considerable time.

On the part of the prosecution the testimony of the chemist of the Pure Food Department was to the effect that taking as a standard of extract of lemon the spirits of lemon as defined by the United States Pharmacopœia formula that the extract produced by the respondent showed no lemon oil present. It further appears that spirits of lemon made according to the pharmacopœia formula would contain from 25-100 to 35-100 of one per cent of citral. It also appeared that 30 per cent of alcohol appeared in the product made by respondent, and that according to the pharmacopœia formula 80 per cent was used, and that it cost less to make the extract using but 30 per cent of alcohol than if 80 per cent was used. It was also shown that a trace of coal tar dye was found in the extract made by respondent, but it was conceded that there was nothing whatever injurious in the extract as prepared by Mr. Jennings. The extract sold by respondent was made by what is known as the shaking out process, the purpose being to make an extract that contains no oil and as little alcohol as possible, a product that simply contains the flavoring properties of the lemon oil without the turpenes. This system has been employed by Mr. Jennings and by other manufacturers for the past three years; and it is claimed that all the elements and properties of lemon oil remained except the turpenes, and the testimony tended to show that the complete flavoring qualities are extracted by this process.

The circuit judge charged the jury as follows:

"In 1895 the Legislature of this State thought it wise to pass a law relative to the adulterations of food and food products. Perhaps there may have been some amendments since that time, but that was the foundation of the law. That law covers lemon extract as it covers all other products that are sold on the market. It seems at the time the law was passed and since that time there hasn't been—there isn't incorporated within that law any special formula for the manufacture of lemon extract. Now, we can hardly say, gentlemen of the jury, that at the time of the passage of that law that the Legislature didn't have some recognized

and defined standard by which these essences or extracts should be governed or controlled. I think it would be hardly fair to the Legislature to claim that there wasn't a standard they had in their mind at that time, and for the purposes of this case I will instruct you gentlemen, that at that time and at this time this standard that appears here in the United States Pharmacopoeia is the standard recognized by the legislators of this State and the one to which—the one that is in force so far as it applies to the Pure Food Law of this State with reference to that particular product. And if this lemon extract is manufactured in conflict with that formula as I shall hereafter call your attention to it, and you should find from the evidence, why it would be your duty to convict the defendant here.

"By that formula it appears that it is necessary to have five per cent of lemon oil in the lemon extract and that lemon oil shall be cut by a sufficient quantity of alcohol to perform that act. Of course, you know that that means in common parlance it should dissolve the oil. In addition to that, as the evidence tends to show in this case, after those things are put together, the fluid, whatever it might be, would be nearly the color of water. As coloring there may be or should be five per cent of lemon rind, and those ingredients when added together would be lemon extract, and that, gentlemen, will be the standard as applied to the Pure Food Law of this State. Now, gentlemen, I don't mean by that statement that lemon extract cannot be manufactured by any other process except by that to which I have called your attention. I don't mean that. It is the claim of the defendant here that he has discovered a process by which he can manufacture lemon extract containing all of the qualities that lemon extract manufactured according to that formula would possess and not have entirely all of the ingredients in the first instance that are provided in the formula. And as I view this case, gentlemen, that is one of the important propositions in connection with this case—that, and the question of coloring—in the judgment of the court is the case, and that all of the testimony in the case here revolves itself about those two propositions.

"It is the claim of the defendant, as I say, he has discovered a process by which he can produce in this lemon extract all the qualities that would be produced by adding alcohol and lemon oil together, and that manufacturing it by that means he produces it chemically by taking a larger quantity of lemon oil and extracting certain parts of it. Now, gentlemen, if you find and are satisfied by the evidence in this case that after this lemon extract was manufactured as defendant here claims he did manufacture it possesses all the qualities in strength and otherwise that it would possess if manufactured according to this formula, he is not guilty under this law. That is, he is not guilty of manufacturing an impure article, unless there are certain other articles that enter into the case to which I call your attention. As I say, in the first instance, it is claimed that according to the formula it should be alcohol and five per cent of lemon oil. Now if by some other process he can manufacture from the lemon oil and alcohol a product that would contain all of the elements that these two elements would contain if so mixed, he would not be guilty so far that would be lemon extract except the color of it.

"It is conceded here by all parties in interest, I think, that the only object of the lemon peel is to produce coloring. But there is another element to which the prosecuting attorney has called our attention. The evidence tends to show, gentlemen, that if this product is produced as claimed here on the part of the defendant, that after production by this process that the product will be nearly white. As I say, if it contained all of the elements of lemon extract, I don't think he would be guilty under this law, and if you are so satisfied, of course, at that point it would be your duty to find a verdict of not guilty unless there is some other matter in which he has violated this law.

"There is another provision of this Pure Food Law that provides that ingredients shall not be colored. In this case it appears that after this fluid substance is produced which he claims is just the same as produced under this formula, that he desires to change it to a lemon color. In other words, he puts in an ingredient which he claims would produce the same effect as this lemon rind. What is the object, gentlemen, or what was the object of Mr. Jennings adding this color? If the object was by any means to make it appear better or of greater value than it really is; if that was the object in adding that product, of course it is your duty without any question to find this defendant guilty, because he hadn't any right to add that kind of a product or any other kind of a product to this fluid which

he had produced and sell it for lemon extract, because that is a direct violation of one of the provisions of this Pure Food Law."

We think this charge presents fairly three questions for consideration: First, whether the pharmacopoeia formula is to be considered as defining lemon extract; second, if so, whether an omission of ingredients not essential to its purposes as a food product is a violation of the statute; third, whether the instruction relative to the addition of coloring matter should be sustained.

The statute defining what shall be deemed adulteration, so far as it relates to this case, declares that an article shall be deemed adulterated when: "First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; fourth, if it is in imitation of, or is sold under the name of another article; * * * sixth, if it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; seventh, if it contains any added substance or ingredient which is poisonous or injurious to health." Compiled Laws, Sec. 5012.

We are agreed with the circuit judge that in referring to articles of food and to protect the users thereof the legislature must have had in view some standard, and as lemon essence or lemon extract had therefore acquired a well-defined meaning we incline to the view that it is proper to resort to the pharmacopoeia formula for the purpose of determining what lemon extract consists of. Does it follow from this that the legislature intended to prohibit improvement in the manufacture of lemon extract? If a means should be discovered by which a larger percentage of the flavoring quantity of the lemon might be extracted would it be an infraction of this law that the manufacturer should use such larger proportion of the essential ingredient of the lemon extract? We think not. We think it is open to manufacturers to improve a common article of food so long as no infringement of the law or spirit of the act defining what shall be deemed adulteration takes place. According to the proofs offered by the defendant it is very clear in the present case no substance or substances have been mixed with this extract so as to lower or depreciate or injuriously affect its quality, strength or purity.

As to the second condition which amounts to adulteration the case is not so clear. This provides that if any inferior or cheaper substance or substances have been substituted wholly or in part for it, that it shall amount to adulteration. We think, however, this provision should be read in connection with the succeeding one, to wit: "If any valuable or necessary constituent or ingredient has been wholly or in part abstracted, from it." So construed the provision prohibiting the substitution of any inferior or cheaper substance, wholly or in part, for it means the substitution for an essential ingredient of such cheaper or inferior substance. Now if it be a fact, as the testimony on the part of the respondent tends to show, that it is a positive advantage to exclude the turpene wholly from the extract and to lessen the quantity

of alcohol used, then the essential ingredients of lemon extract have not had substituted for them anything inferior or cheaper. We are aware that this view of the law may make it more difficult to establish the individual case, but as the statute is a penal statute it should receive a strict construction.

It follows from the views above expressed that the instruction of the learned circuit judge was erroneous inasmuch as the jury were told in effect that if any ingredient of lemon essence as defined by the pharmacopoeia was wanting in this extract sold by the respondent that there should be a conviction. We think the instruction should have been that if the lemon extract sold by respondent contained all the ingredients and in quantities such as prescribed by the pharmacopoeia which are adapted to use as food, and that nothing was eliminated except such ingredients as could be dispensed with without injury to the product as a food product there was no violation of the statute.

The only other provision of the statute involved is the sixth, which in effect prohibits coloring the article produced whereby damage or inferiority is concealed. The instruction upon this branch of the law was also erroneous if we are correct in our view of the main question. The elimination of non-essential ingredients from the extract certainly does not show damage or inferiority, and as the conceded facts are that the coloring matter employed was not injurious to health in any way this provision has no application.

The other questions discussed do not require special mention. It may be noted in passing that the circuit judge in referring to the testimony of expert witnesses spoke of it as boughten testimony. We think this expression was unfortunate. While it is proper for the jury to take into account the fact that expert witnesses are employed at an extra compensation paid them, the implication that the extra compensation necessarily amounts to a purchase of their testimony is hardly warranted; while the jury may consider this fact as bearing on their credibility, it is not proper that the court should intimate an opinion of that character.

The judgment should be reversed, and a new trial ordered.

The other justices concurred.

BENNETT v. CARR.

(Opinion filed July 14, 1903.)

Pure Food Law, Act 22, P. A. 1901, Construed—Sale of Yellow Oleomargarine.

Act No. 22 of the Public Acts of 1901 prohibiting the sale of oleomargarine except where it is "free from coloration or ingredient that causes it to look like butter," does not prohibit the sale of oleomargarine whose color is natural, genuine, and not an imitation, and the ingredients themselves naturally produce the color.

The term "ingredient," used in Act 22, Public Acts of 1901, does not refer to the ingredients essential to produce the article as defined by the legislature, but to an ingredient used to produce color.

Certiorari to the Circuit Court for Muskegon county. Fred J. Russell, judge, to review an order denying the petition of John R. Bennett for mandamus to compel John M. Carr to issue a warrant. Order affirmed.

Charles A. Blair, Attorney General, and Cross, Lovelace and Ross, for relator and appellant.

Smith, Nims, Hoyt and Erwin for defendant and appellee.

Grant, J.: Relator is the inspector of the State Food and Dairy Department. On the 24th day of February, 1903, he made complaint before the defendant, a justice of the peace of the county of Muskegon, charging one Martin Aamondt with having sold one pound of oleomargarine contrary to Act No. 22 of the Public Acts of 1901. The respondent refused to entertain the complaint and issue warrant, on the ground that the complaint stated no offense under the provisions of said act, and that said act is unconstitutional and void. Relator thereupon applied to the circuit court for the county of Muskegon for the writ of mandamus to compel the respondent to issue said warrant, and proceed with the examination. The circuit court sustained the action of the respondent, and the case is now before us for review upon certiorari.

The statute in question reads as follows:

"Section 1. No person, by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter." The complaint charges Mr. Aamondt with unlawfully selling one pound of oleomargarine "made wholly or in part of fat, oil or oleaginous substance or compound thereof, as follows, to wit:

Water	11.75 per cent
Butter fat	1.34 per cent
Beef fat, lard and cottonseed oil.....	79.24 per cent
Salt and other mineral matter.....	4.54 per cent
Curd	3.13 per cent

Said article, product or compound not being then and there butter produced from unadulterated milk or cream from the same, and being then and there in imitation of yellow butter produced from unadulterated milk or cream from the same, and not being then and there oleomargarine in a separate and distinct form and in such manner as would advise the consumer of its real character, free from coloration or ingredient that would cause it to look like butter, but that the said oleomargarine was then and there of a yellow color in imitation of butter, said color not being then and there produced by the addition of any artificial coloring matter, but said color being produced solely by the said ingredients therein contained, the said ingredients hereinbefore set forth having been selected and used in the manufacture of said oleomargarine in such manner and in such quantities and proportion as to produce the oleomargarine that was then and there in imitation of yellow butter produced from unadulterated milk or cream from the same, contrary to the form of the statute," etc.

The oleomargarine so purchased was manufactured in the city of Chicago, State of Illinois, by one Moxley, a resident of said city, and

was sold by said Moxley to said Aamondt in the usual course of trade, and by said Aamondt was sold in the usual course of retail trade in the same form and condition, and in the original package, in which it was received by Aamondt from Moxley.

It is conceded that this oleomargarine has a yellow color similar to butter, but the color is not produced by any artificial coloring substance or ingredient used for the purpose of coloration, but is produced solely by the selection and use, in proper proportions, of the substantial, recognized, legal and necessary ingredients of commercial oleomargarine.

Does the complaint state an offense covered by the statute? The answer depends upon the construction to be given to the statute. The relator contends that the statute covers all products which look like yellow butter, and that it is immaterial whether such color is produced by some ingredient introduced for the purpose of causing the product to look like butter, or whether such color is produced by authorized and legal constituent food ingredients. The respondent contends that the statute is aimed only at the use of ingredients used solely for the purpose of producing the yellow color, and does not prevent the manufacture of an article whose color is natural, genuine and not an imitation. Penal statutes must be construed strictly and cannot be extended by construction beyond the intent of the act as expressed on its face. The conditions existing at the time the statute was enacted, and the mischief to be remedied, are important factors in construing penal statutes. Two acts covering the same subject must be construed as in *pari materia*, and, if possible, effect given to both. These are elementary rules of construction. At the time the statute in question was enacted the only method in use in causing oleomargarine to look like yellow butter was the introduction of some extraneous coloring matter. This was the mischief to be remedied. We clearly so understood in *People v. Rotter*, 9 D. L. N. 284; 91 N. W. Rep. 167, where, speaking through Chief Justice Hooker, we said of this statute: "The statute under consideration * * * does not prohibit sales of oleomargarine which is not tainted with the prohibited ingredient."

See also *People v. Phillips*, 9 Id. 393; 91 N. W. Rep. 616.

The legislature has defined oleomargarine which may be manufactured and sold in this State. Sec. 6, Act No. 147, Public Acts of 1899. It is conceded that the respondent has complied with this act. If we give the enlarged construction to the statute now in question, as urged by the relator, it follows that the legislature has prohibited the manufacture and sale of a valuable article of food, the natural color of which resembles yellow butter (itself almost universally colored by extraneous matter). The manufacturer of such a product, if he sold it at all, would be compelled to introduce some coloring matter so as to make it look unlike the yellow butter of commerce. These two statutes must be construed together. The article sold by the respondent is clearly authorized by the first act. The latter act does not in terms prohibit its sale and manufacture. It does prohibit the use of any substance for the sole purpose of producing yellow color. The use of such coloring matter was the sole mischief then known to exist, and the only danger to be apprehended and guarded against.

A similar statute was passed in New Jersey, and the like contention was made to support a conviction, and the court said: "To construe

the statute so broadly would render it practically prohibitive of the sale of all oleomargarine; for, of course, the compound must derive color from its ingredients, and such a prohibition has manifestly not been declared."

Ammon v. Newton, 14 At. Rep. 610; 50 N. J. 548.

McCan v. Commonwealth, 48 At. Rep. 470; 198 P. A. St. 509.

Our statute is copied verbatim from that of Massachusetts. The Supreme Court of that State, in a case just decided, has held that the statute applies only to extraneous substances or ingredients which cause the product to look like butter, and not to cases where the ingredients themselves naturally produce the color.

Commonwealth v. Himberg, ——— ———.

The Supreme Court of the United States so held in regard to the same statute.

Plumley v. Commonwealth, 155 U. S. 461.

The term "ingredient," used in the statute, does not refer to the ingredients essential to produce the article as defined by the legislature, but to an ingredient used to produce color. The maxim *noscitur a sociis* applies.

Under this disposition of the case it becomes unnecessary to discuss any constitutional question.

The order is affirmed.

The other justices concurred.

PEOPLE v. HARRIS.

(Opinion filed December 1, 1903.)

Food—Corn Syrups—Glucose.

1. Public Acts 1903, No. 123 forbids the sale of cane syrup or beet syrup mixed with glucose, unless the package containing the same be distinctly branded "Glucose Mixture" or "Corn Syrup," with the name and percentage of each ingredient contained therein plainly stamped thereon. Held, That a sale of syrup made of 90 per cent pure corn syrup and 10 per cent cane syrup, labeled "Victor Corn Syrup," and truthfully stating the ingredients composing it, is not in violation of the statute, in that it is not branded "Glucose, 90 per cent, and cane syrup 10 per cent."

Exceptions from circuit court, Kent county; Willis B. Perkins, judge.

Benjamin S. Harris was convicted of violating the "Act in relation to the sale of corn syrup" and brings exceptions. Reversed.

Respondent was prosecuted and convicted for a violation of Act No. 123 of the Public Acts of 1903, entitled "An act in relation to the sale of corn syrup," and reading as follows:

"Sec. 1. No person shall offer or expose for sale, have in his possession with intent to sell, any cane syrup, beet syrup, or glucose, unless the barrel, cask,

keg, can, pail or package containing the same be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any cane syrup or beet syrup mixed with glucose unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled 'Glucose Mixture' or 'Corn Syrup' in plain Gothic type not less than three-eighths of an inch square, with the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-quarter of an inch square. Each and every package of syrup either simple or mixed shall bear the name and address of the manufacturer. Such mixtures or syrups shall have no other designation or brand than herein required that represents or is the name of any article which contains a saccharine substance; and all brands or labels required shall be an inseparable part of the general or distinguishing label, and that the general or distinguishing label shall be that principal and conspicuous sign under which it is sold.

"Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty days nor more than ninety days, or by both such fine and imprisonment in the discretion of the court."

The complaint charges him with the unlawful sale of "a two-pound can, two pounds, of a certain article, product and compound, to wit: corn syrup, so-called, made wholly or in part of cane syrup and glucose as follows, to wit: Cane syrup ten per cent, and glucose ninety per cent, said can containing said article, product and compound sold as aforesaid not being then and there stamped, branded or stenciled with the name and percentage by weight of each ingredient contained therein, to wit: cane syrup ten per cent, glucose ninety per cent; but said article, product and compound sold as aforesaid was then and there stamped and branded as follows, to wit: 'Cane syrup ten per cent, corn syrup ninety per cent,' against the form of the statute in such case made and provided, and against the peace and dignity of the people of the State of Michigan."

Respondent moved to quash the complaint and warrant for two reasons: (1) they charged no offense; (2) the act authorizes the use of the words "Corn Syrup." instead of Glucose in the statement of the ingredients placed upon the can. The motion was overruled and the case proceeded to trial upon the following agreed facts:

1. The respondent sold on October 12, 1903, at the city of Grand Rapids, Michigan, the can of Victor Corn Syrup in question.

2. The label on said can of syrup sold, as stated in the complaint, contains the formula of contents of said can as follows: "Corn syrup, ninety per cent; cane syrup, ten per cent;" and is not branded or labeled as the people claim it should be, "Glucose, ninety per cent; Cane Syrup, ten per cent."

3. The Victor Corn Syrup in question is in fact composed of ninety per cent syrup made from corn, commercially called Glucose or Corn Syrup, and ten per cent of cane syrup.

4. Glucose contained in the Victor Corn Syrup in question is in fact a pure syrup made entirely from corn.

5. Grape Sugar, commercially known as Glucose, either solid or liquid, is a generic name for starch sugar as distinguished from the cane sugar.

6. A simple beet syrup is evidently the same as the simple cane syrup.

7. Originally, Glucose, which was first made from grapes, was, for the reason that starch sugars are identical with the sweet principle of grapes, termed, for a great many years, and until lately was known chemically and commercially as Grape Sugar.

8. Commercially, Glucose is now made in this country entirely from corn, although abroad it is still made from potatoes.

9. The consuming public does not understand that Glucose is a syrup made entirely from corn. On the contrary, it is claimed by the respondent that the public generally supposes Glucose to be an inferior product made from animal fat, or a product of the glue factory, while they do recognize corn syrup as being made from corn.

10. Glucose as made from corn and contained in Victor Corn Syrup in question, is entirely harmless and recognized generally by highest authorities as a valuable food product.

11. Glucose made from corn, in fact, costs, at the present time, owing partially to cost of raw material, more to produce, and sells for more in the markets, than manufactured cane syrup.

The court directed a verdict of guilty.

Grant, J. Does the statute require respondent or manufacturers to state upon their labels that corn syrup consists of ninety per cent glucose? No such statute has come under the decision of other courts. It is a new question, and must be determined upon general principles of construction.

It is conceded that the label states the exact facts; that the article is made of ninety per cent pure corn syrup and ten per cent cane syrup; that it deceives no one; that Victor Corn Syrup is a valuable and pure article of food, and that the ingredient ninety per cent corn syrup "is entirely harmless, and recognized generally by the highest authority as a valuable food product," whether it be called glucose or corn syrup. The term "Glucose" is obnoxious to many, if not a majority of the public, and is misunderstood by them. They do not know that in this country glucose is now made entirely from corn, and that the terms glucose and corn syrup are commercially synonymous. This fact is known to the manufacturers and perhaps the dealers. A prejudice exists against the term "glucose" because that material can be manufactured from many substances, including sawdust. In Europe it is made mainly of potatoes. By many it is associated with a glue factory. In this country corn syrup and glucose are not only commercially synonymous terms, but it is stated by counsel for respondent that they are permitted to be so used in all the other states. We have not verified this statement, but as it is not challenged we assume it to be correct.

We have, therefore, a valuable and healthful product, made from two pure, valuable and healthful ingredients, advertised and placed upon the markets for what it really is, without any deception, fraud or chance to injure the public in any way. Yet the contention on behalf of the people is that the legislature has enacted that in putting this product upon the market its manufacturers and sellers must attach to it a name obnoxious to the public, and, in fact, calculated to deceive them. When it is claimed that such innocent acts are made malum

prohibitum, there must be either an express provision of the statute so declaring, or the language of the statute must leave no other conclusion reasonable. This statute does not expressly require it.

The argument on behalf of the people is "that glucose made from corn is glucose, the simple syrup mentioned in and intended to be mentioned in said act." The further claim is "that had there been any intention on the part of the legislature to use the terms 'glucose' and 'corn syrup' interchangeably and as synonymous then the term 'corn syrup' would have been enumerated as one of the simple syrups." We do not think this reasoning at all conclusive. Prior to the enactment of this statute the law prohibited the sale of molasses, syrup or glucose unless distinctly branded or labeled with its true and appropriate name,—or any mixture thereof, unless it was branded or labeled "glucose mixture," and the per cent in which glucose entered into its composition. C. L., sec. 5024. The present act which repeals the provisions of the former act expressly permits the mixture to be labeled "glucose mixture," or "corn syrup," and forbids mixtures or syrups to have any other designation than required in the act so far as such designation "represents or is the name of any article which contains saccharine substance." It is a fair presumption that the legislature, in enacting this law, recognized the obnoxious character of the term "glucose" among the people, and permitted, and intended to permit, a mixture of corn syrup and cane syrup to be sold under the name of Corn Syrup. The title to the act provides for the sale of corn syrup, and in its body provides that when cane syrup is mixed with it, the manufacturers and dealers shall state the proportionate ingredients. The smaller amount of cane syrup used does not change the character of the general product, any more than salt changes the character of bread, or, sugar that of cake, and the act permits the sale of the mixture as corn syrup. Syrup, as defined by the United States Department of Agriculture, "is the product obtained by purifying and evaporating the juice of a sugar producing plant without removing any of the sugar." Syrup thus obtained from cane is cane syrup; syrup so obtained from sorghum is sorghum syrup, and syrup so obtained from corn is corn syrup. There is no reason why corn syrup should be labeled glucose, and until the legislature have so ordered in language susceptible of no other construction, the law must be held not to bear that construction.

Conviction reversed, and respondent discharged.

Hooker, C. J., took no part in the decision. The other justices concurred.

PEOPLE v. HINSHAW.

(Opinion filed January 5, 1904.)

Pure Food Law—Adulterated with Harmless Ingredients—Act 193, P. A. 1895, Construed.

The coloration of "Extract of Vanilla" with any substance to give it the appearance of greater strength is a violation of the pure food law, even though such coloring matter is harmless.

Act 193, P. A. 1895, as amended by Act 118, P. A. 1897, held constitutional.

Error to the circuit court for Saginaw county; B. A. Snow, judge.

Appeal of Emory H. Hinshaw from a conviction under the pure food law. Affirmed.

Charles A. Blair, Attorney General, and Frank A. Rockwith, Jr., and C. M. Browne, for the people.

Eugene Wilber for respondent and appellant.

Respondent was prosecuted and convicted of the unlawful sale of "Extract of Vanilla, which was then and there adulterated within the meaning of act number 193 of the Public Acts of the State of Michigan of the year 1895, as amended by act number 118 of the Public Acts of 1897, in this, to wit: That said Extract of Vanilla was colored by the addition of a foreign coloring matter, to wit: coal tar dye, whereby its inferiority was concealed, and whereby said Extract of Vanilla was made to appear better and of greater value than it really was."

Two errors are assigned.—(1) that the court erred in instructing the jury; (2) that the act is unconstitutional as repugnant to the Fourteenth Amendment of the Constitution of the United States.

Grant, J.: I. The instruction complained of is as follows:

"Now before the inferiority of an article can be concealed it must be necessarily first ascertained as to whether or not there is an inferiority in the article. If it is an inferior article and that inferiority is concealed by reason of the addition of foreign substance in this vanilla, and you are satisfied from the proof beyond a reasonable doubt of the fact, then he would be guilty, although he had no knowledge as to the foreign substance being in the bottle."

It appears that no such claim was made on behalf of respondent upon the trial; no request was asked covering the points now raised. The only objections shown by the record to have been made are,—first, that the title is not broad enough to cover the provisions in the amendment of 1897; second, that the legislature has no power to prohibit and punish acts in themselves harmless; third, that the act is unconstitutional.

Even in criminal cases it is the duty of counsel to call the attention

of the court to the points on which an instruction is desired. *People v. Ezzo*, 104 Mich. 311.

We, however, are of the opinion that the information charges the coloration to make an inferior article appear better and more valuable than it really was, and is sufficient; and also that there was evidence to sustain the allegation. The State Chemist testified that the effect of the coal tar dye was to make the article appear of greater value than it really is, and that the people would think it stronger than it really was. It is true, his testimony was weakened by cross-examination, but not sufficient to take the question from the jury,—especially in view of the fact that no other purpose than to make the article appear better, is shown.

II. The use of coal tar dye being harmless, counsel for respondent insists that the case comes within the rule of the recent case of *People v. Jennings*, 94 N. W. R. 216; 10 D. L. N. 39. That case had not been decided when this case was tried. No such theory was advanced upon the trial. Even if it were, we, however, think the case is clearly distinguishable from *People v. Jennings*. The color given to lemon extract, which of itself is almost colorless, is no indication whatever of the strength of the extract or its value. Its color is a mere whim or caprice of the trade, and no more indicates the character and value of the extract than does the coloring matter, used to color butter, indicate its character and value. In this case Vanilla resembles the color of the bean from which it is produced. Its strength and value are judged to some extent at least, under the evidence in this case, from its color. No other object is apparent from the use of the coloring than to make it appear of a quality better than it really is.

III. It is urged that the act is unconstitutional on account of the proviso "that nothing in this act shall prevent the coloring of pure butter." This act is similar in its provisions to that involved in *People v. Rotter*, 91 N. W. R. 167; and *People v. Phillips*, Id. 616. The constitutionality of such acts was there sustained, and a discussion is unnecessary. *Capital City Dairy Co. v. Ohio*, 183 U. S. 238, 246, is decisive of the question.

The conviction is affirmed.

The other justices concurred.

The Pratt Food Company,

v.

Arthur C. Bird, Dairy and Food

Commissoner of the State of Michigan.

Montgomery, J.: The bill in this case is filed to restrain the defendant, his clerks and employes, from writing, printing, issuing, publishing or sending out any bulletin, writing, publication or notice, to the effect that complainant's preparations sold as Pratt's Food for Horses and Cattle, Pratt's Poultry Food, and Pratt's Animal Regulator, or either of them, are not licensed under Act No. 12 of the Laws of 1905, and warning the public against buying or selling these preparations.

The bill sets out that the defendant asserts and claims that these

preparations come within the terms of the act, and that unless restrained by injunction he will so assert by bulletins issued to the trade, and by this method intimidate dealers and prevent their purchasing complainant's products. (We are stating simply the substance of the averments in brief.) It is also asserted that the effect of such bulletins will be to destroy and ruin the complainant's trade and work irreparable injury.

Upon the hearing below the bill was dismissed, and the complainant appeals. Three questions are presented upon the record, first, whether in view of the case complainant is entitled to the remedy here invoked; second, whether Act No. 12 of the Public Acts of 1905 is constitutional; third, whether if it be constitutional the complainant's products come within the terms of the statute.

1. The statute in question is an amendment of Act No. 211 of the Public Acts of 1893, entitled "An act to provide for the appointment of a Dairy and Food Commissioner, and to define his powers and duties and fix his compensation," and by section 18 of the act it is provided that "Any manufacturer, company, person or persons who shall sell, offer or expose for sale or for distribution, in this State, any concentrated commercial feeding stuff used for feeding live stock, shall furnish with each car, or other amounts shipped in bulk, and shall affix to every package of such feeding stuff, in a conspicuous place, on the outside thereof, a plainly printed statement, clearly and truly certifying the number of net pounds in the car or package sold or offered for sale, the name or trademark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis, stating the percentages it contains of crude protein, crude fibre, nitrogen—free extract and ether extract, all constituents to be determined by the methods adopted by the association of official agricultural chemists. Whenever any feeding stuff is sold at retail, in bulk or in packages belonging to the purchaser, the agent or dealer shall furnish to him a certified copy of the chemical analysis named in this section. The term concentrated commercial feeding stuffs as used in this act shall include linseed meal, cotton seed meal, pea meals, cocoanut meals, gluten meals, oil meals of all kinds, gluten feeds, maize feeds, starch feeds, mixed sugar feeds, hominy feeds, rice meals, oat feeds, corn and oat feeds, meat meals, dried blood, clover meals, mixed feeds of all kinds, slaughter house waste products; also all condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended for feeding to domestic animals. * * * " A penalty is provided for the violation of this provision.

It is strenuously insisted by the Attorney General that if it be conceded that the complainant's products do not come within the inhibition of this statute, yet no remedy by injunction exists, for the reason that the effect of issuing an injunction is to restrain the prosecution of a criminal proceeding. Numerous cases are cited, among them *Arbuckle v. Blackburn*, 113 Fed. Rep. 625; *State v. Wood*, 155 Mo. 425, and *Predigested Food Co. v. McNeal*, 1 Oh. N. P. 266.

In so far as these cases lay down the rule that a court of equity will not interfere to restrain a public officer from invoking the criminal law and instituting a prosecution for a violation of a statute they have our full approval. A court of equity will not transfer to its own juris-

diction the trial of a criminal case, and this though the prosecution may fall with some hardship upon the accused party. Nor, as a general proposition, will a court interfere to restrain the publication of a libel.

But we hold in *Beck v. Railway Teamsters' Protective Union*, 118 Mich. 497, that injunction will lie to restrain a combination of persons from acts which tend to ruin complainant's business by bringing to bear upon his customers intimidating and coercive means. The principle which should rule the present case is identical. If the acts which are threatened are unlawful it cannot be doubted that placing in the hands of every dealer in the State a bulletin which in effect threatens them with prosecution in case they make use of these products in the form in which they are lawfully sold to them would be to absolutely exclude complainant's business from the State. The case presented is very similar in this aspect to that of *American School of Magnetic Healing v. McAnnulty*, 187 U. S. 94, which case involved the right of the Postmaster General to exclude the complainants from the use of the United States mails. An order had been made excluding complainants from the use of the mails. The court interfered and held that such order was a violation of the property rights of the persons affected and granted relief.

2. Is the law constitutional?

It is claimed that the law is unconstitutional in that it violates Section 20 of Article IV of the constitution which provides that no law shall embrace more than one object, which shall be expressed in its title.

It is established by our decisions that if what is introduced by way of an amendment to an act might have been incorporated in the act under the original title there is no violation of this section. *People v. Gadway*, 61 Mich. 285; *Attorney General v. Bolger*, 128 Mich. 355.

The question is therefore whether under the original title a provision fixing a standard of pure food and providing means to prevent deception in the sale of such food is within the title of an act to provide for the appointment of a Dairy and Food Commissioner and to define his powers and duties and fix his compensation. We think the title is within our previous decisions sufficient. It is obvious to one reading this title that there must have been imposed upon the commissioner certain powers and duties to make his Department of any value to the State, and furthermore that these powers and duties must have relation to something. It is equally obvious that the relation of these powers and duties must be to the subject which is brought within the Department that is created, viz., the Dairy and Food Department.

The title is very similar to that which established the Insurance Bureau. In *Connecticut Mutual Life Ins. Co. v. State Treasurer*, 31 Mich. 6, it was held that a title which read "An act to establish an Insurance Bureau" was sufficiently broad to cover any pertinent regulations respecting the bureau's course of action towards those engaged in insurance, and any appropriate provisions for prescribing the duty due from the insurance companies to the State in the matter of taxation, without violating the constitutional provisions.

3. The question of more difficulty is the question of fact as to whether the preparations of complainant are concentrated commercial feeding stuffs as defined by the act cited above.

It is true the testimony shows that upon each of the labels which accompanied Pratt's Food for Horses and Cattle was the statement: "Pratt's Food is a regulator, to be used according to directions, and is not sold as a feeding stuff, nor is it to be fed in place of grain or any other feed." But in addition to claiming medicinal properties for the food it was also stated how it should be used to fatten and improve stock. It was stated that "It fattens both cattle and hogs quickly, makes them grow larger and healthier and makes their meat tender, more juicy and better eating." It also stated that for horses it "produces bone, muscle and better staying powers; improves the wind."

When this statute was enacted commercial feeding stuffs were on the market and this fact must have been known to the Legislature.

In employing the broad language "All condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended to cover all preparations for which the claim of nutritive qualities was made." Complainant's preparations come within this language.

Similar representations were made in the labels of other preparations.

We are of the opinion that the Circuit Judge was right in holding that all these preparations were within the statute.

The decree is affirmed with costs.

Pierre Viaus Maple Company, Complainant, v. Arthur C. Bird, Dairy and Food Commissioner, and Joseph Schnitzer, Inspector of the Dairy and Food Department, Defendants. Before Grant, C. J., Blair, Montgomery, Ostrander and Hooker, JJ.

Complainant is the manufacturer of a brand of syrup known as the "Pierre Viaus Pure Canadian Maple Syrup and Cane Syrup." The trade-mark being the letters P. V. The bill alleges that the Canadian Pure Maple Syrup exceeds the amount of Cane Syrup. It sets forth efforts made with the Pure Food Commission to agree upon a label which shall comply with the law, the failure of these negotiations, the representations made to the trade by the defendants that the sale of this syrup is illegal, and the injurious effect upon the complainant's business, and prays that the defendants be restrained from in any manner interfering with its business. To this bill of complaint the defendants demurred upon the ground that the syrups mentioned in said bill of complaint are not labeled as required by the laws of this State. The demurrer was overruled and the defendants have appealed.

Grant, C. J.

It is urged by the Attorney General that the sale of this mixture is in violation of section 5007 of the Compiled Laws, reading as follows:

"That it shall be unlawful for any person, dealer, firm, manufacturer or corporation to manufacture, and sell, or offer for sale, any maple sugar, maple molasses or maple syrup that is in anywise adulterated with common sugar, beet sugar, glucose or any other foreign substance without distinctly marking, stamping or labeling the articles or the package containing the same with the true and appropriate name of such article and the percentage in which common sugar, beet sugar, glucose or any other foreign substance enters into the composition of the same."

It is urged by the complainant that the case falls within Act 193, Public Acts of 1895, known as the Pure Food Law, and entitled "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink."

Sec. 1 (C. L. 5010) of the act prohibits the sale or having in possession with intent to sell any article of food which is adulterated within the meaning of the act.

Sec. 2 (C. L. 5011) defines the term "food" to include all articles used for food or drink.

Sec. 3 (C. L. 5012) states what articles shall be deemed to be adulterated. The section closes with the following proviso:

"Provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definitions fourth and seventh of this section."

The court held that this syrup came within the Pure Food Law (Act 193), and not under the act prohibiting the adulteration of maple sugar, etc., and that it came within the proviso above quoted.

We think the court was in error. The act in regard to the manufacture and sale of maple sugar is complete in itself, and covers the entire subject. It was intended to prohibit the manufacture and sale of maple sugar under any name without labeling the product with the true and appropriate name, stating thereon the percentage of any other ingredient used in its manufacture. The title of the act is "An act to prohibit the adulteration of maple sugar, maple molasses and maple syrup." The word "adulteration" in this statute means the mixture of any foreign substance, wholesome or unwholesome, with maple sugar. The evident purpose of the statute is to compel all persons manufacturing or selling maple sugar to inform the public not only of what the product is composed, but the proportions of each article used in the manufacture.

Decree reversed, and bill dismissed with costs of both courts.

Armour & Co., Complainants,

v.

Arthur C. Bird, State Dairy and Food Commissioner, et al., Defendant.

Before: Blair, C. J., Grant, Montgomery, Ostrander, Hooker, J. J.:

Complainant is a corporation organized under the laws of the State of New Jersey, with headquarters in Chicago, Illinois. It is and has been for many years, engaged in the manufacture and sale of fresh and cured meats, and sausage and other meat products. Its sale of these products, including sausage, extended over the entire State of Michigan.

In the year 1906, the defendant, the Dairy and Food Commissioner, caused chemical examination to be made of the various brands of sausage sold within the State, including that of the complainant, and found that many of them contained cereals and a percentage of water greater than that found in meat alone. On January 16, 1907, he issued the following circular:

"Gentlemen:—A growing tendency on the part of manufacturers of sausage, bolognas and similar meat products, to use various preparations and substances foreign to the legitimate ingredients necessary to the manufacture of these articles of food, the said preparations being commonly known and designated as fillers, binders, etc., has prompted this Department to make a thorough investigation into such sausages. This has been done for the purpose of ascertaining the true reasons for the widespread practice of using the preparations mentioned.

The results obtained from the investigation as carried on in the Department laboratory lead to but one conclusion, viz., that the addition of so-called binders and fillers to meat products is primarily for the purpose of substituting in part an inferior or cheaper substance for a legitimate ingredient, thereby lessening the cost of manufacture.

The first and second subdivisions of section 5012 of the Compiled Laws provide that an article shall be deemed to be adulterated within the meaning of the act,—first, if any substance or substances have been mixed with it so as to lower or depreciate or injuriously affect its quality, strength or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it. Basing its ruling on the subdivisions of section 5012 above cited, this Department holds that the addition of the so-called binders and fillers mentioned to meat products is contrary to law. From and after this day, manufacturers and dealers will be held to a strict account for each and every violation. Provided, however, that dealers within the State are given until January 25, 1907, to dispose of stocks on hand.

"Yours very truly,

"A. C. BIRD,

"State Dairy and Food Commissioner."

This circular was sent to all the meat dealers of the State and a copy sent to the complainant at Chicago. Those employed under the direction of the defendant Food Commissioner also verbally informed the retail dealers of the State that they would be prosecuted if they did not comply with the above order.

The trade of the complainant in Michigan was very large, and the effect of this circular, and the threats of prosecution verbally made, naturally tended to decrease very largely the complainant's sales in this State, and to cause it considerable loss. Therefore, on November 18, 1907, complainant filed its bill of complaint in this cause, setting forth the above circular and threats on the part of the defendants, the injury to its business, that defendants were acting illegally in their conduct, and praying that they be restrained from "declaring in any manner, orally or in writing, to the customers and patrons of your orator, or to the people of the State of Michigan, that the sausages and other meat products of your orator containing cereal, manufactured and sold, and offered for sale in the State of Michigan, are sold and offered for sale in violation of any statute of the State of Michigan." The bill alleges that the sausage manufactured and sold by the complainant bear labels showing their respective ingredients, in accordance with the standard fixed by the laws of the United States and the regulations of the Department of Agriculture thereunder, a sample of said labels being set forth in the bill and reading as follows:

ARMOUR'S "DEVONSHIRE" Farm Style SAUSAGE MEAT. Made from the Meat of Hams and Selected Young Pork. Prepared with choicest spices and cereals. Armour & Company.

U. S. inspected and passed under the Act of Congress of June 30, 1906. Establishment 2 A.

An answer was duly filed denying that the sausage manufactured and sold by the complainant in this State containing cereals and water is a wholesome product, or that it is manufactured in accordance with the Act of Congress of June 30, 1906, and the regulations of the United States Department of Agriculture; or that it is a compound or mixture within the meaning of the proviso of Sec. 3, Act 193, Public Acts of 1895, as amended. The answer admits that the sausage of the complainant is shipped into this State in packages, or boxes, labeled with the trade name of the sausage, and the words "with cereal," but alleges that the consumer, or purchaser of the retail dealer, is in no way advised, when he purchases that the sausage contains cereals, or cereal and added water, unless such purchaser purchased the entire package shipped to the dealer, and that even then he was not informed that the product contains added water.

Both the bill and answer contain other allegations which we deem it unnecessary to state. Issue was joined, proofs taken in open court and by deposition, and after a full hearing decree was entered dismissing the bill. The statute, C. L. Sec. 5012, under which defendants claim to justify their action, is as follows:

"An article shall be deemed to be adulterated within the meaning of this act: First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of, or is sold under the name of another article; fifth, if it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal; sixth, if it is colored, coated, polished, or powdered whereby damage or inferiority is concealed or if by any means it is made to appear better or of greater value than it really is; seventh, if it contains any added substance or ingredient which is poisonous or injurious to the health: Provided, That nothing in this act shall prevent the coloring of pure butter: And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and it is not in violation with definitions fourth and seventh of this section."

Grant, J.: The following facts are admitted or established beyond controversy:

(a) The sausage manufactured by the complainant is a wholesome article of food. It contains nothing deleterious to health.

(b) It is a mixture or compound within the meaning of the proviso in the statute above quoted, being composed of meat, cereal, salt and spices.

(c) It is made in accordance with the Act of Congress and directions prescribed thereunder by the Commissioner of Agriculture, and under the inspection of the United States inspectors.

(d) Sausage is made of different kinds of meat, viz., pork, beef and veal. Whether manufactured for interstate commerce or domestic use within the State, it is sometimes made with cereal, and sometimes without it. Cereal is not a necessary ingredient to its manufacture, although it has been used by most manufacturers for many years.

(e) Water is an essential ingredient in the manufacture of sausage, whether made with or without cereal. This is shown by the evidence of the defendants. One of their witnesses, with an experience of thirty-five years, testified:

"In the manufacture of pork sausage we use pork, and if the pork is a little too fat we put in some veal or beef. It is necessary to have a little water added, a quart and a half to 100 pounds. It is pretty hard to make them without. We use a little more water than would be found in the meat when freshly killed."

Another who had been engaged in the manufacture of sausage since 1864, testified:

"I put a little water in pork sausage. I use from five to ten pounds of water to 100 pounds of meat. Enough to make it pliable that is all. I use from eight to ten pounds of water in making beef sausage. I presume you could make sausage without water, but you could not stuff it very well."

Another who learned to make sausage in Germany, testified:

"I have always used water and still use water in the manufacture of sausage. Water is necessary. They use water in making sausage in Germany. So far as I know everyone used it."

The United States regulations require that the water used shall be pure.

(f) It is not in violation of definitions four and seven of the act. It does not violate definition seven because it contains no substance or ingredient poisonous or injurious to health. It does not violate definition four because meat is the basis and principal ingredient of the article. As manufactured by complainant, it contains from two to ten per cent of cereal. It is and has been, for more than forty years, recognized in the trade as sausage. When sold as sausage with cereal added it deceives no one, is not an imitation, and manufacturers are entitled to manufacture and label it as sausage with cereal. It is not contended that manufacturers have not the right to use the name "sausage" when sold with a proper label.

The Federal statute is practically identical with that of Michigan, and contains a proviso reading:

"That an article of food which does not contain any added poison-

ous or deleterious ingredients shall not be deemed to be adulterated or misbranded in the following cases:

First. In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food under their own distinctive names, and not in imitation of or offered for sale under the distinctive name of another article, if the name be accompanied on the same label or brand with a statement of the place where said article has been manufactured or produced.

Acting under this law, the Department of Agriculture, on September 12, 1906, adopted the following regulation:

"Sausages and Chopped Meats. The word sausage without a prefix indicating the species of animal is considered to be a mixture of minced or chopped meats with or without spices. If any species of animal is indicated as pork sausage, the sausage must be wholly made from the meat of that species. If any flour or other cereal is used the label must so state. If any other meat product is added, the label must so state."

To this regulation the department added "manufacturers are warned that the above rulings do not exempt them from the enforcement of State laws."

The learned circuit judge, in his opinion, found that sausage manufactured as is that of the complainant "is probably as healthy as pure sausage such as was known to the fathers."

Briefly stated then, the case is this: complainant, a resident of another state, is manufacturing and shipping into this State a wholesome article of interstate commerce in strict accord with the law and regulations of the federal government. State law cannot interfere with this interstate traffic. The law here involved does not attempt to interfere with it, or to deny to the complainant the right to sell and ship its goods to retail dealers in this State. There are, therefore, but two questions material to the determination of this controversy, viz.:

(1) May the State through its legislature enact laws regulating the domestic sales of this product to consumers within the State?

(2) Does the statute above cited include the product made by the complainant?

It is not contended that the state is not clothed with the power to regulate the domestic sale of such products after their shipment into the State. Intoxicating liquor, which is a subject of interstate commerce, may be shipped into this State in original packages, but it cannot be sold within the State in violation of the State laws regulating or prohibiting its sale. No contention is made that the State statute in question is not constitutional and reasonable. Pure food laws have been enacted probably in all the states, and have been universally held valid when reasonable. The sole question therefore left to determine is whether the statute includes sales to consumers in small quantities taken from the original packages. If the domestic dealer were to sell an original package labeled as above to the consumer, such sale would be valid, because the label complies with the law and notifies the purchaser that the article is not a sausage of meat alone, but a sausage composed of meat and cereal. It is not contended that manufacturers

of sausage have not the right to label their product "sausage" with the statement added that it is mixed with other products, specifying them.

If we understand the position of counsel for complainant correctly, it is that in construing this statute courts should be governed, not by the popular and common understanding of the meaning of the word "sausage," but by its trade and commercial meaning; that is, its meaning as understood between the manufacturers and their customers to whom they sell for retail to consumers. They say:

"It is unmistakable that the legislature understood it was enacting a law with reference to an article of food which was then a subject of trade and commerce among the people. There were at times scores of different kinds of "sausage" upon the market, that is, sausage made in different ways, a difference in the ingredients used in the various kinds, and a variance in the proportions used; and different manufacturers and dealers made and dealt in different kinds, and each knew that all this variety of meat food products were included in the term "sausage," and the legislature is charged with knowledge of that fact, and must be presumed to have used the term "food" accordingly."

In support of this they cite several cases from the federal courts construing the tariff or duty acts, in which it has been held that the laws of Congress imposing duties upon imported goods must be construed with reference to the trade or commercial meaning of the articles mentioned in the law. Among the cases cited are the

Two Hundred Chests of Tea, 9 Wheaton 430;
Cadwalader v. Zeh, 151 U. S. 171;
McCoy v. Hedden, 38 Fed. Rep. 89.

In the Two Hundred Chests of Tea it was held that "bohea tea" was used in the duty act in its known commercial sense, viz., "that article which in the known usage of the trade acquired that distinctive appellation."

In Cadwalader v. Zeh, the question was whether, under the duty act, earthenware consisting of small cups, saucers, mugs, etc., having on them pictures of animals and other objects, and letters of the alphabet, should have been assessed as toys with 35 per cent ad valorem, or as china, etc., with 60 per cent ad valorem. The case was held to depend upon the commercial meaning of the word "toys."

In McCoy v. Hedden, the question was whether currycombs were dutiable under a provision imposing a duty upon combs of all kinds. If they were not known to the trade among merchants as combs they were held not dutiable as such. These and other similar cases arose between the United States and importers of foreign goods, and do not apply to cases arising under the pure food laws of state governments. Courts will take cognizance of the well-known fact that farmers, laboring men and consumers are not generally familiar with the customs of trade and commerce in importing goods, or of understandings of the trade between manufacturers and merchants who buy those products for retail trade. Such construction would emasculate the pure food laws and deprive the people of the protection which the legislature wisely intended to give them.

Sausage is defined by all the lexicographers as an article of food composed of meat, salt and spices. (See Worcester's and Century dictionaries.) The people generally so understand it. The writer of this opinion would be compelled to admit that until very recently he had no knowledge that cereal was used in the manufacture of sausage. It is too manifest for further argument that the legislature in enacting the law was not providing for the regulation of sales between manufacturers and merchants, but between retail dealers and consumers. They enacted the law solely for the protection of consumers, the people who buy and eat the products. The consumer who prefers sausage made of meat alone is entitled to be informed that he is buying such an article. The consumer who prefers sausage mixed with cereal is entitled to know that he is purchasing that article. The contention of the complainant, if sustained, would deprive the consumer of this right which the statute plainly gives him. We cannot follow *State v. Nesland*, 120 N. W. Rep. 107, (Iowa), wherein it is held that sales in small quantities from original packages are not within the statute. In that case a pound of lard was sold from a fifty pound package properly labeled with its constituent parts, but it was held that the retail dealer was not required to label the small packages sold. That opinion is based upon the well-known rule that penal statutes must be strictly construed. The statute of Michigan expressly provides that these mixtures must be labeled showing the different kinds of ingredients contained in them. Sec. 2 is as follows:

"The term food, as used herein, shall include all articles used for food or drink, or intended to be eaten or drank by man, whether simple, mixed or compound."

This is a general statute covering all food products not otherwise specifically provided for. We consider its provisions perfectly plain, and not subject to any misunderstanding or uncertainty. To hold otherwise would substantially exclude all the benefits and protection to the people of the State which the statute was clearly designed to grant. We, therefore, hold that retail packages of small amounts taken from the original package of the manufacturer, and sold to the consumer, must be properly labeled as the law directs.

The court below dismissed the complainant's bill, thereby granting it no relief whatever. In view of the position taken by the Food Commissioner in his circulars and answer herein filed; and in view of the importance to the complainant, and to the people of the State to know under what conditions a wholesome article of interstate commerce may be sold in this State, we think the learned circuit judge should have entered a decree defining the rights and determining under what conditions complainant, as well as other manufacturers, may have their valuable and wholesome products sold by the retail dealers, and to restrain the defendants from interfering with such legitimate sales.

The Food Commissioner, as above stated, denied in his answer that the sausage made by the complainant was a wholesome product, or that it was a mixture or compound within the meaning of the act, and insisted that it was an adulteration. His attitude is further shown by his reply to complainant's letter of January 17, 1907, asking "if there would

be any objection to using cereal if such fact is stated on label same as provided by national law." He denied this permission, which was, not only a compliance with the federal law, but a compliance with the State law.

The use of cereal in the manufacture of sausage has been very general. The State Food and Dairy Commissioner of Iowa, who at the time of the hearing below had held office for five years, testified to its general use in that state, stating that the "ingredients used by the Iowa manufacturers in making sausage are chopped meats, salt, spices, flour and sufficient water." In July, 1907, he issued a bulletin stating:

"The Commissioner has no authority to establish standards for the information of the public, it is here stated that this Department will not interfere with the sale of sausage because of the presence of wholesome flour, provided that an analysis does not show more than five per cent of such flour."

It appears to be established by the evidence that sausage made with cereal is sold cheaper than that made of meats alone. If so, the people desiring to buy and eat the cheaper product should have the privilege of doing so, and such product should not by any decision of the court be prohibited from sale.

The opinion of the circuit judge does not prohibit its sale when properly labeled. He held that the trouble was not with the use of cereal, but in permitting the product to be sold at the retail counter without informing the customer that cereal is a part of it. Counsel for respondents conceded in the oral argument in this court that it was a wholesome food and was entitled to sale in this State, when sold under a proper label informing customers of what it is composed.

It is conceded that the use of cereal requires more water than does sausage made with meat alone. Anyone of intelligence would, upon reflection, know this to be the fact. The only doubt I entertain in the case is whether the label should, in addition to the words "with cereal," contain also "and water." In view of the fact that water is generally used in the manufacture of all sausage, and that no law or regulation of the food department has fixed the amount of water that may be used, it would seem like judicial legislation for the court to require the label to show that water is used in the manufacture.

The statute does not require the label to state the proportion of the ingredients composing the mixture, but only the names of the ingredients. The statute makes special provision for butter, cheese, lard, canned fruits and vegetables, coffee and molasses. There are other statutes governing the manufacture and sale of specific products requiring the proportions of the ingredients to be placed upon the labels, such as Act 123, Public Acts 1903; *People v. Harris*, 135 Mich. 136.

It is within the power of the legislature to pass an act specifically provided for the manufacture and sale of sausage, and that the labels should state the proportions of the ingredients used. We hold a label "sausage with cereal" upon packages sold to consumers is a compliance with the statute in labeling the mixture, and a decree should be entered so stating. A decree will be entered in this court in accordance with the above opinion. No costs will be allowed.

ABSTRACT OF LAWS.

The following is but a brief synopsis of the Dairy and Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulation, and dealers are advised to examine the laws carefully and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of this act is deemed a sale.

Under this statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
4. If it is an imitation of or is sold under the name of another article;
5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;
6. If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored.
7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;
2. They must contain nothing injurious to health;
3. They must not be sold in imitation of, or under the name of another article;
4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;
5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coined name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

Buckwheat Flour.—If labeled "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled "Buckwheat Flour Compound" in letters not less than one-half inch in length followed with the name of the maker and factory and the location of such factory. Any other label or printed matter upon the package shall not be in contravention of the above requirements.

Butter.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of, or contributed by, three or more persons must register with the Department on or before April 1 of each year.

Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

Catsup.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

Cheese.—Must be made exclusively of milk or cream. Only cheese made from the milk from which no cream has been taken can be sold as, or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cream is purchased of, or contributed by, three or more persons must register with the Department, on or before April 1 of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of a fee of one dollar annually.

Coffee.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled

"Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

Coffee Substitute.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coined name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size.

Cream of Tartar.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

Extracts, Flavoring.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka whether mixed or simple.

Extracts of vanilla and tonka may be mixed and sold as "Extracts of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract of vanilla and tonka as "Extract of Vanilla," or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. So called extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are salable only as mixtures or compounds or as imitations. Each container must bear the name and address of the manufacturer.

Farinaceous Goods.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound, under an original or coined name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substance and sold as "Honey Compound."

Ice Cream.—See Act No. 70, Public Acts 1909, page 50 herein.

Jellies, Jams, Fruit Butters, etc.—Imitation fruit jellies, jams, preserves, fruit butters or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly, Jam, Preserves or Fruit Butter," with

the name and location of manufacturer, and have no other label of whatever name.

Lard.—Imitation lard in manufacturers' packages must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' packages the name of the maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask, or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words "Pure and without drugs or poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

Maple Sugar and Maple Syrup.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

Milk.—Must contain not less than three per cent fat and twelve and one-half per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives in milk is prohibited.

Molasses.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer. (See Syrup.)

Oleomargarine.—All compounds of animal or vegetable fats made in imitation or semblance of butter, or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here" printed in black ink in plain Roman letters not less than three inches in length nor less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary bold faced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold faced letters not less than pica in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must *also* deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold faced capital letters, not less than five line pica in size the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

Pancake Flour.—If containing more than one article must be sold as a mixture or compound under an original or coined name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract, and shall contain not more than sixteen per cent of crude fibre.

Prepared Mustard.—Pure Mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer.

Renovated Butter.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Renovated Butter."

Packages put up for immediate delivery shall be covered by wrappers on which must be printed the words "Renovated Butter" in Gothic letters at least three-eighths of an inch square and such wrappers shall

contain no other words or printing thereon, and said words "Renovated Butter" so printed shall not be in any manner concealed.

If packed in tubs or other receptacles the words "Renovated Butter" must be printed in Gothic letters at least three-eighths of an inch square on two sides of the same.

If uncovered or not in a case or package a placard containing said words in the same form as above described shall be attached to the mass in such manner as to be easily seen and read by the purchaser: Provided, If at any time the laws of the United States provide that butter manufactured as is described in this act, shall be labeled "Process Butter," then and in such case only shall such substitution be permitted and the labeling of said butter as "Process Butter" shall be deemed a compliance with this act.

Saccharine.—The use of saccharine in all food products is prohibited.

Syrup.—Syrup mixed with glucose must be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup" in plain Gothic type not less than three-eighths of an inch square. It shall also have the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-fourth of an inch square. Every package of syrup either simple or mixed shall bear the name and address of the manufacturer. It shall have no other designation or brand that represents or is the name of any article which contains a saccharine substance and all brands or labels shall be an inseparable part of the general or distinguishing label, which shall be that principal and conspicuous sign under which it is sold.

Spices.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See Pepper.)

Sweet Chocolates and Sweet Cocoas.—If containing no other substance than cocoa mass, and not to exceed 60 per cent of sugar and flavoring, will not be classed as a compound or mixture. They must be plainly and distinctly labeled sweet chocolate or sweet cocoa, and bear the name and address of the manufacturer.

Vinegar.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegar must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegar made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegar made

wholly or in part from distilled liquor must be branded "Distilled Vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

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